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The Engineering Record DIRECTORY

OF MANUFACTURERS OF AND DEALERS IN

ENGINEERS and CONTRACTORS MACHINERY and SUPPLIES

SECOND EDITION
1909

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The second edition of this Directory is offered to the subscribers and readers of The Engineering Record in the belief that they will find it of considerably greater convenience and value than the first edition in view of its enlarged form, materially increased number of headings, improved both in accuracy and comprehensiveness, coupled with the numerous cross-reference headings which have been added.

No claim is made that it is a complete directory of the trade, for the names listed therein are limited to those whose advertisements appeared in the Sixth Annual Contractors' Number of The Engineering Record dated April 3, 1909.

This Directory is believed to be the only one published comprised exclusively of manufacturers of, and dealers in, machinery and supplies for engineers' and contractors' use.

The edition printed is 20,250 copies, distributed among the regular subscribers to The Engineering Record, and to an additional special list of engineers and contractors who received copies of the 1909 contractors' number of the paper.

From its first number printed, thirty years ago, The Engineering Record has covered thoroughly every branch of civil engineering—the fabrication and erection of steel bridges and skyscrapers, reinforced concrete construction of the modern mill and factory, mill architecture, irrigation, reclamation, docks, dredging, foundations, waterworks, sewerage, railroad building, road building, and the mechanical equipment of large industrial plants, hotels and office buildings.

In the year ending May 31, 1909, 760,250 copies of The Engineering Record, over 14,600 copies per week, were circulated among consulting engineers and contractors, mill architects, city, county and state engineers, bridge and structural engineers, waterworks superintendents, chief engineers of railroads and industrial plants all over the world.

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Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 B'way, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Knowles Steam Pump Works, 115 B'way, New York.
Laidlaw-Dunn-Gordon Co., 116 B'way, New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Mietz, August, 128 Mott St., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Northern Engineering Works, Detroit, Mich.
Norwalk Iron Works, So. Norwalk, Conn.
Scully Steel & Iron Co., Chicago, Ill.
Sullivan Machinery Co., Railway Exch., Chicago, Ill.
Union Steam Pump Co., Battle Creek, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wisconsin Engine Co., Corliss, Wis.
York Mfg. Co., York, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Air Hose and Couplings

Abenaque Machine Works, Westminster Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Hardsoog Co., Martin, Allegheny, Pa.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Sullivan Machinery Co., Railway Exch., Chicago, Ill.

Air Lift Pumping Machinery

Abenaque Machine Works, Westminster Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
American Air Compressor Works, 26 Cortlandt St., N. Y.
American Well Works, Aurora, Ill.
Blaisdell Machinery Co., Bradford, Pa.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Goulds Mfg. Co., Seneca Falls, N. Y.

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Norwalk Iron Works, So. Norwalk, Conn.
Phillips & Worthington, 90 West St., New York.
Prescott, Fred M., Steam Pump Co., Milwaukee, Wis.
Sullivan Machinery Co., Railway Exch., Chicago, Ill.
Sweeney & Gray, 81 Sixth St., Long Island City, N. Y.
Union Steam Pump Co., Battle Creek, Mich.

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Allis-Chalmers Co., Milwaukee, Wis.
Ashton Valve Co., 271 Franklin St., Boston, Mass.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Jenkins Bros., 71 John St., New York.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati, Ohio.
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Alloys

Goldschmidt Thermit Co., 90 West St., New York.

Aluminum

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Davis-Bournonville Co., 88 West St., New York.
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Davis-Bournonville Co., 88 West St., New York.
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Anvils

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Architectural and Ornamental Iron Works (See Iron Work, Architectural and Ornamental)

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Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.
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Mittineague Paper Co., Mittineague, Mass.

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Johns-Manville Co., H. W., 100 William St., New York.
U. S. Fireproofing Co., 4 E. 31st St., New York.

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Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
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Knickerbocker Chemical Co., 24-26 Stone St., New York.
Sicilian Asphalt Paving Co., 41 Park Row, New York.
Standard Asphalt & Rubber Co., 205 La Salle St., Chicago, Ill.
Standard Oil Co., 26 Broadway, New York.
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Barber Asphalt Co., A. L., 90 West St., New York.
Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
Sicilian Asphalt Paving Co., 41 Park Row, New York.
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Asphalt Plants and Tools

Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
Barron, Jas. S., 133 Franklin St., New York.
Buffalo Steam Roller Co., Buffalo, N. Y.
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Drake Standard Machine Works, 298 W. Jackson Blvd., Chicago, Ill.
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Lake Erie Engineering Works, Buffalo, N. Y.
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Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
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Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Attorneys

King, George A. and William B., Washington, D. C.

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Power & Mining Machinery Co., Cudahy, Wis.
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United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Banks

Coal & Iron National Bank, 143 Liberty St., New York.

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Pennsylvania Contracting Co., Publication Bldg, Pittsburg, Pa.

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Bars (Steel)

American Bridge Co. of N. Y., 30 Church St., New York.
American System of Reinforcing, 189 La Salle St., Chicago, Ill.
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Concrete Steel Co., 29 Broadway, New York.
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Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
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Lackawanna Steel Co., 2 Rector St., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
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Rogers-Shear Co., Warren, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
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Whitehead & Kales Iron Works, Detroit, Mich.

Beams (See Structural Steel)

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Wonham, Magor Car & Mfg., 30 Church St., N. Y.

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Smith Co., S. Morgan, York, Pa.
Traylor Engineering Co., Allentown, Pa.
Wiener Co., Ernst, Fulton and Church Sts., N. Y.

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Channon Co., H., Market & Randolph Sts., Chicago, Ill.
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Dixon Crucible Co., Joseph, Jersey City, N. J.

Belt Tighteners
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Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave. & W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome and Lafayette Sts., New York.
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Traylor Engineering Co., Allentown, Pa.
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Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Conveying Weigher Co., 92 West St., New York.
Fairbanks Co., Broom & Lafayette Sts., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Belting Co., Lawrence, Mass.
Peerless V-Belt Co., 215 S. Clinton St., Chicago.
Robins Conveying Belt Co., Passaic, N. J.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Benders (Rail)
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Hardsocg Co., Martin, Allegheny, Pa.
Indianapolis Switch & Frog Co., Springfield, Ohio.
McCoy Co., Henry J., 67 Dey St., New York.
Scully Steel & Iron Co., Chicago, Ill.
Union Iron Works, Hoboken, N. J.
Watson-Stillman Co., 50 Church St., New York.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

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Allis-Chalmers Co., Milwaukee, Wis.
Buffalo Forge Co., Buffalo, N. Y.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Dudgeon, Richard, 24 Columbia St., New York.
Fairbanks Co., Broom & Lafayette Sts., New York.
Hanson & Son, A. P., 106 W. Adams St., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Pittsburg Mfg. Co., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Watson-Stillman Co., 50 Church St., New York.

Blacksmiths' Tools

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
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Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Lufkin Rule Co., Saginaw, Mich.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

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Allis-Chalmers Co., Milwaukee, Wis.
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Petroleum Iron Works, Sharon, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Traylor Engineering Co., Allentown, Pa.

Blast Hole Loaders

Du Pont de Nemours, E. I., Powder Co., Wilmington, Del.

Blasting Powder

Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington, Del.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
National Powder Co., 200 Fifth Ave., New York.

Blocks and Tackle

American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Peal St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Union Iron Works, Hoboken, N. J.

Blocks and Trolleys

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Northern Engineering Works, Detroit, Mich.
Union Iron Works, Hoboken, N. J.
Whitehead & Kales Iron Works, Detroit, Mich.

Blowers

Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
De Laval Steam Turbine Co., Trenton, N. J.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
General Electric Co., Schenectady, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Blue Print Filing Cabinets

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Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Fritz Mfg. Co., Grand Rapids, Mich.
Kolesch & Co., 138 Fulton St., New York.

Blue Printing Machinery

American Drafting Furniture Co., Rochester, N. Y.
Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Buckeye Engine Co., Salem, Ohio
General Electric Co., Schenectady, N. Y.
Keuffel & Esser, Hoboken, N. J.
Kolesch & Co., 138 Fulton St., New York.
Williams, Brown & Earle, 918 Chestnut St., Philadelphia, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Boiler Fittings, Mountings and Tubes

American Injector Co., Detroit, Mich.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Lunkenheimer Co., Cincinnati, Ohio.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Boiler Makers' Punching Machines

Buffalo Forge Co., Buffalo, N. Y.
Dudgeon, Richard, 24 Columbia St., New York.
Fairbanks Co., Broome & Lafayette Sts., New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Scully Steel & Iron Co., Chicago, Ill.

Boiler Tubes

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Boilers (Heating)

American Radiator Co., 104 W. 42d St., New York.
Baldwin, William J., World Bldg., New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Gurney Heater Mfg. Co., 200 Franklin St., Boston, Mass.
Hitchings & Co., 1170 Broadway, New York
Lake Erie Engineering Works, Buffalo, N. Y.
Leffel & Co., James, Springfield, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Wurdack Electric Mfg. Co., 19 S. 11th St., St. Louis, Mo.

Boilers (Hot Water, Copper)

American Radiator Co., 104 W. 42d St., New York.
Badger, E. B. & Sons Co., 63-75 Pitts St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.

Boilers (Tubular)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago.
Climax Road Machine Co., Marathon, N. Y.
Cole Mfg. Co., R. D., Newnan, Ga.
Conklin, H. O., Equipment Co., Harvey, Ill.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Lake Erie Engineering Works, Buffalo, N. Y.
Leffel & Co., James, Springfield, Ohio.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Lombard Iron Works, Augusta, Ga.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Phœnix Iron Works Co., Meadville, Pa.
Ransome Concrete Machinery Co., Dunellen, N. J.
Tippett & Wood, Phillipsburg, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Vulcan Iron Works, Wilkes-Barre, Pa.
Walsh's Holyoke Steam Boiler W'ks, Holyoke, Mass.
York Mfg. Co., York, Pa.

Boilers (Water-Tube)

Babcock & Wilcox Co., 85 Liberty St., New York.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Parker Boiler Co., Penna. Bldg., Philadelphia, Pa.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Bolts

Baltimore Bridge Co., Baltimore, Md.
Berlin Construction Co., Berlin, Conn.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Decatur Bridge Co., Decatur, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Koppel Co., Arthur, Pittsburg, Pa.

Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
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Scully Steel & Iron Co., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Bolts (Expansion, Toggle), Etc.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Johns-Manville Co., H. W., 100 William St., New York.
Star Expansion Bolt Co., 147 Cedar St., New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Bolts (Machine)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Star Expansion Bolt Co., 147 Cedar St., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Bonds (Contractors')
Ætna Life Insurance Co., Hartford, Conn.
Ritch, William T., Inc., 1123 Broadway, New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

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Ainsworth, Wm., & Sons, Denver, Col.
Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Audel & Co., Theo., 63 Fifth Ave., New York.
Baldwin William J., World Bldg., New York.
Christensen, G. A., P. O. Box 22, San Francisco, Cal.
Clark Pub. Co., Myron C., 353 Dearborn St., Chicago, Ill.
Engineers' Club (Phila.), 1122 Girard St., Phila., Pa.
Journal of Assoc. of Engr. Soc., 31 Milk St., Boston, Mass.
Kolesch & Co., 138 Fulton St., New York.
McGraw Publishing Co., 239 W. 39th St., New York.
Technical Press Association, 51 rue Aurore, Brussels, Belgium.
Wiley, John, & Sons, 43 E. 19th St., New York.

Boosters
General Electric Co., Schenectady, N. Y.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Boots
McCoy Co., Henry J., 67 Dey St., New York.
Rubberhide Co., 212 Essex St., Boston, Mass.

Boots (Elevator)
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Graver, Wm., Tank Works, East Chicago, Ind.
Traylor Engineering Co., Allentown, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Borings, Test
American Well Works, Aurora, Ill.
Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.
Phillips & Worthington, 90 West St., New York.
Raymond Concrete Pile Co., 135 Adams St., Chicago, Ill.
Sullivan Mach'y. Co., Railway Exch., Chicago, Ill.
Sweeney & Gray, 81 Sixth St., Long Island City, N.Y.
Terry Core Drill Co., 50 Church St., New York.

Boxes (Dump)
Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Eagle Wagon Works, Auburn, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Longenecker & Co., Chas., 150 Nassau St., New York.
Troy Wagon Works Co., So. Walnut St., Troy, Ohio.
Wiener Co., Ernst, Fulton & Church Sts., New York.

Boxes (Take-Up)
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Chain Belt Co., Milwaukee, Wis.
Cresson Co., Geo. V., Allegheny Ave. & W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Braces (Extensible)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Kalamazoo Foundry & Machine Co., Kalamazoo, Mich.
Star Expansion Bolt Co., 147 Cedar St., New York.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.

Brackets and Cross-Arms
Carbolineum Wood Preserving Co., 349 W. B'way, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
Kratzer & Co., W. N. 3230 Smallman St., Pittsburg, Pa.
Wyckoff Pipe & Cresoting Co., Inc., 50 Church St., N. Y.

Brick and Tile
Besser Mfg. Co., Alpena, Mich.
Evens & Howard Fire Brick Co., St. Louis, Mo.
Fredenburg & Lounsbury, 289 Fourth Ave., New York.
McAvoy Vitrified Brick Co., 345 Arch St., Philadelphia, Pa.
National Paving Brick Mfg. Assoc., Board of Trade Bldg., Indianapolis, Ind.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Peerless Brick Machine Co., 18 N. 6th St., Minneapolis, Minn.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Brick (Building and Sewer)
Besser Mfg. Co., Alpena, Mich.
Fredenburg & Lounsbury, 289 Fourth Ave., New York.
Good, Geo. S., Fire Brick Co., Patton, Cambria Co., Pa.
Metropolitan Paving Brick Co., Canton, Ohio.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Warner Co., Chas., Wilmington, Del.

Brick Machinery
American Blower Co., Detroit, Mich.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Besser Mfg. Co., Alpena, Mich.

Burrell Mfg. Co., Bradley, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave. & W. 17th St., Philadelphia, Pa.
Drake Standard Machine Works, 298 W. Jackson Blvd., Chicago, Ill.
Green Fuel Economizer Co., Matteawan, N. Y.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Peerless Brick Machine Co., 18 N. 6th St., Minneapolis, Minn.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Brick (Paving)

American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Fredenburg & Lounsbury, 289 Fourth Ave., N. Y.
Good, Geo. S., Fire Brick Co., Patton, Cambria Co., Pa.
Metropolitan Paving Brick Co., Canton, Ohio.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Bridge Builders

American Bridge Co. of N. Y., 30 Church St., N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Berlin Construction Co., Berlin, Conn.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Burger Iron Co., Akron, Ohio.
Canton Bridge Co., Canton, Ohio.
Champion Bridge Co., Wilmington, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clinton Bridge & Iron Works, Clinton, Iowa.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Decatur Bridge Co., Decatur, Ill.
Des Moines Bridge & Iron Co., Des Moines, Iowa.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
Virginia Bridge & Iron Co., Roanoke, Va.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridge Engineers

American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Burger Iron Co., Akron, Ohio.
Canton Bridge Co., Canton, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clinton Bridge & Iron Works, Clinton, Iowa.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Decatur Bridge Co., Decatur, Ill.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
King Bridge Co., Cleveland, Ohio.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Waddell & Harrington, New Nelson Bldg., Kansas City, Mo.
Watson & Co., Wilbur J., Citizens Bldg., Cleveland, O.
White & Co., J. G., Inc., 43 Exchange Pl., N. Y.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridge Operating Machinery

Allis-Chalmers Co., Milwaukee, Wis.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave. & W. 17th St., Philadelphia, Pa.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
King Bridge Co., Cleveland, Ohio.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridge, Pier and Building Foundations (See Contractors', General), (also Foundations)

Bridge Railings

Belmont Iron Works, 22d & Washington Aves., Philadelphia, Pa.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Canton Bridge Co., Canton, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Decatur Bridge Co., Decatur, Ill.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Riverside Bridge Co., Martin's Ferry, Ohio.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Stewart Iron Works Co., Cincinnati, Ohio.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridges (Bascule)

American Bridge Co. of N. Y., 30 Church St., N. Y.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
King Bridge Co., Cleveland, Ohio.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Snare & Triest Co., 143 Liberty St., New York.
Waddell & Harrington, New Nelson Bldg., Kansas City, Mo.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridges (Concrete)

Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
American Concrete Steel Co., Newark, N. J.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Clinton Bridge & Iron Works, Clinton, Iowa.
Concrete Steel Co., 29 Broadway, New York.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Ferro Concrete Construction Co., Cincinnati, Ohio.
Freeborn Engineering & Construction Co., Scaritt Bldg., Kansas City, Mo.
Hennebique Construction Co., 1170 B'way, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Pennsylvania Contracting Co., Publication Bldg., N. Y.
Pneumatic Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Snare & Triest Co., 143 Liberty St., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Waddell & Harrington, New Nelson Bldg., Kansas City, Mo.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wilkins, Grant, Atlanta, Ga.

Bridges, Roofs, Etc. (Steel)

American Bridge Co. of N. Y., 30 Church St., N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Berlin Construction Co., Berlin, Conn.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Burger Iron Co., Akron, Ohio.
Canton Bridge Co., Canton, Ohio.
Champion Bridge Co., Wilmington, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clinton Bridge & Iron Works, Clinton, Iowa.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Decatur Bridge Co., Decatur, Ill.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Geisel Construction Co., 620 Chestnut St., St. Louis, Mo.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.

Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago, Ill.
King Bridge Co., Cleveland, Ohio.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Memphis Bridge Co., Memphis, Tenn.
Milwaukee Bridge Co., Milwaukee, Wis.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Phœnix Bridge Co., 410 Walnut St., Philadelphia, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Shoemaker & Co., Lewis F., Harrison Bldg., Philadelphia, Pa.
Snare & Triest Co., 143 Liberty St., New York.
Virginia Bridge & Iron Co., Roanoke, Va.
Waddell & Harrington, New Nelson Bldg., Kansas City, Mo.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.

Bridges (Suspension)

American Bridge Co. of N. Y., 30 Church St., N. Y.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Canton Bridge Co., Canton, Ohio.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Leschen & Sons Rope Co., A., St. Louis, Mo
New York Cableway & Engineering Co., 1 Rector St., New York.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Roebling's Sons Co., John A., Trenton, N. J.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
Waddell & Harrington, New Nelson Bldg., Kansas City. Mo.

Bronze Founders

Du Bois Iron Works, Du Bois, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Lunkenheimer Co., Cincinnati, Ohio.
Morris Co., I. P., Philadelphia, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.

Buckets

Barron, Jas. S., 133 Franklin St., New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Browning Mfg. Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Cockburn Barrow & Machine Co., 32 Church St., N. Y.
Cyclopean Iron Works, Nutley, N. J.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Hayward Co., 60 Church St., New York.
Insley Mfg. Co., Indianapolis, Ind.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.

New York Cableway & Engineering Co., 1 Rector St., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Union Iron Works, Hoboken, N. J.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Buckets (Clam Shell)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hayward Co., 50 Church St., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Williams, G. H., Co., Cleveland, Ohio.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co. Walter A., St. Louis, Mo.

Buckets (Concrete)

Barron, Jas. S., 133 Franklin St., New York.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Insley Mfg. Co., Indianapolis, Ind.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.

Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Buckets (Dredging and Excavating)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Bucyrus Co., S. Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Hayward Co., 50 Church St., New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Williams, G. H., Co., Cleveland, Ohio.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Buckets (Dumping)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cockburn Barrow & Machine Co., 32 Church St., N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Insley Mfg. Co., Indianapolis, Ind.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Union Iron Works, Hoboken, N. J.

Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Buckets (Elevator)

Allis-Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co. Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave. & W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Belting Co., Lawrence, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Robins Conveying Belt Co., Passaic, N. J.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Buckets (Excavating)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Hayward Co., 50 Church St., New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Williams, G. H., Co., Cleveland, Ohio.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Buckets (Orange Peel)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.

Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Hayward Co., 50 Church St., New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., G. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wiener Co., Ernst, Fulton & Church St., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Building Blocks

Besser Mfg. Co., Alpena, Mich.
Marquette Cement Mfg. Co., Marquette Bldg., Chicago.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Rockport Granite Co., Rockport, Mass.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.

Building-Block Machinery

Besser Mfg. Co., Alpena, Mich.
Burrell Mfg. Co., Bradley, Ill.
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
Peerless Brick Machine Co., 18 N. 6th St., Minneapolis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Building Foundation

American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Ferro Concrete Construction Co., Cincinnati, Ohio.
Foundation Co., 115 Broadway, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago.
Kidde, Walter, 140 Cedar St., New York.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Raymond Concrete Pile Co., Pittsburg, Pa.
Rockport Granite Co., Rockport, Mass.
Rogers Co., J. S., Moorestown, N. J.
Snare & Triest Co., 143 Liberty St., New York.
Wilkins, Grant, Atlanta, Ga.

Building Material (See Also Cement, Building Blocks and Bridges and Roofs)

Atlas Portland Cement Co., 30 Broad St., New York.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Berger Mfg. Co., Canton, Ohio.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Carbolineum Wood Preserving Co., 349 W. B'way, N. Y.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Decatur Bridge Co., Decatur, Ill.
Glidden Varnish Co., Cleveland, Ohio.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis.
Hermann, Leibu, 11 Broadway, New York.

Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
Jackson, Geo. W., 179 W. Jackson Blvd., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
Lawrence Cement Co., 1 Broadway, New York.
Marquette Cement Mfg. Co., Marquette Bldg., Chicago.
Miller & Co., C. L., 110 E. 23d St., New York.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Peerless Brick Machine Co., 18 N. 6th St., Minneapolis.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Rogers Co., J. S., Moorestown, N. J.
Star Expansion Bolt Co., 147 Cedar St., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Universal Portland Cement Co., Commercial Bank Bldg., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Building Papers

American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Barber Asphalt Paving Co., Maurer, N. J.
Barrett Mfg. Co., 17 Battery Pl., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Warner Co., Chas., Wilmington, Del.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Bulldozers

Fairbanks Co., Broome & Lafayette Sts., New York.

Cables (Drilling)

American Mfg. Co., 65 Wall St., New. York.
American Steel & Wire Co., Commercial National Bank Bldg., Chicago, Ill.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Cables (Manila)

Allis-Chalmers Co., Milwaukee, Wis.
American Mfg. Co., The, 65 Wall St., New York.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plants Mfg. Co., Buffalo, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cableways

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.

Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Carson Trench Machine Co., 16 Dorrance St., Boston.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Roebling's Sons Co., John A., Trenton, N. J.
Union Iron Works, Hoboken, N. J.,
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Caisson Cylinders

Canton Bridge Co., Canton, Ohio.
Clinton Bridge & Iron Works, Clinton, Iowa.
East Jersey Pipe Co., 90 West St., New York.
Foundation Co., 115 Broadway, New York .
Graver, Wm., Tank Works, East Chicago, Ind.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., J. P., Philadelphia, Pa.
Petroleum Iron Works, Sharon, Pa.
Pneumatic Caisson Co., National State Bank Bldg., Troy.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Wilkins, Grant, Atlanta, Ga.

Caisson Cylinders (Wooden)

Foundation Co., 115 Broadway, New York.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Pneumatic Caisson Co., National State Bank Bldg., Troy.

Caisson Foundations

American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Foundation Co., 115 Broadway, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Pneumatic Caisson Co., National State Bank Bldg., Troy.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wilkins, Grant, Atlanta, Ga.

Caissons

American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
Canton Bridge Co., Canton, Ohio.
Cole Mfg. Co., R. D., Newnan, Ga.
East Jersey Pipe Co., 90 West St., New York.
Foundation Co., 115 Broadway, New York.

Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Petroleum Iron Works, Sharon, Pa.
Pneumatic Caisson Co., National State Bank Bldg., Troy.
Scaife & Sons Co., Wm. B., 221 First Ave., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Calking Tools

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Ingersoll-Rand Co., 11 Broadway, New York.
Smith, A. P., Mfg., Co., Newark, N. J.
Water Works Equipment Co., 50 Church St., New York.

Capstans (Hand, Steam and Electric)

American Ship Windlass Co., Providence, R. I.

Car Couplers, Fenders, Parts, Fittings and Car-Wheels

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Koppel Co., Arthur, Pittsburg, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Car Movers and Pushers

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Burrell Mfg. Co., Bradley, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Car Replacers

Fairbanks Co., Broome & Lafayette Sts., New York.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Carbolineum

Carbolineum Wood Preserving Co., 349 W. B'way, N. Y.
Teredo Proof Paint Co., 17 Battery Pl., New York.

Cars

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bergen Point Iron Works, 149 Broadway, New York.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Dahlstrom Metallic Door Co., Jamestown, N. Y.

Dallett & Co., 611 Harrison Bldg., Philadelphia, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kent Machine Co., Kent, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Southern Iron & Equipment Co., Atlanta, Ga.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Ballast)

Channon Co., H., Market & Randolph Sts., Chicago, Ill
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Coal and Ash)

Archer Iron W'ks, Inc., 34th Pl. & Western Ave., Chicago.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Haiss, Geo., Mfg. Co., 138th & Rider Ave., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Koppel Co., Arthur, Pittsburg, Pa.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Concrete)

Archer Iron W'ks, Inc., 34th Pl. & Western Ave., Chicago.
Besser Mfg. Co., Alpena, Mich.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kent Machine Co., Kent, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.

McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Derrick (Self-Propelling)

American Bridge Co., of N. Y., 30 Church St., N. Y.
American Hoist & Derrick Co., St. Paul, Minn.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Dumping)

Allis-Chalmers Co., Milwaukee, Wis.
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Haiss Geo., Mfg. Co., 138th St. & Rider Ave., New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Elevator)

Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Flat)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Koppel Co., Arthur, Pittsburg, Pa.
McCoy Co., Henry J., 67 Dey St., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Southern Iron & Equipment Co., Atlanta, Ga.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Gasoline Motor)
Du Bois Iron Works, Du Bois, Pa.
Janney, Steinmetz & Co., Philadelphia, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Shadegg Engine Co., 315 Third St., So., Minneapolis.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Hand and Push)
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Wallace Hoist Sales Co., Fort Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Industrial)
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Haiss, Geo., Mfg. Co., 128th & Rider Ave., N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
McCoy Co., Henry J., 67 Dey St., New York.

Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Standard Scale & Supply Co., 52 S. Canal St., Chicago.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Whitehead & Kales Iron Works, Detroit, Mich.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg., Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Inspection)

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Mining)

Allis-Chalmers Co., Milwaukee, Wis.
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry, J., 67 Dey St., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Pacific Tank Co., Equitable Bk. Bldg., Los Angeles, Cal.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Whitehead & Kales Iron Works, Detroit, Mich.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars, Second-Hand (See Second-Hand Machinery and Supplies)

Cars (Tank)

Carroll-Porter Boiler & Tank Co, Empire Bldg., Pittsburg, Pa.
Graver, Wm., Tank Works, East Chicago, Ind.
Lake Erie Engineering Works, Buffalo, N. Y.
Scaife & Sons Co., Wm. B., 221 First Ave., Pittsburg, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Wendnagel & Co., 22d & Jefferson Sts., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Tower)
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Velocipede)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cars (Wrecking and Ditching)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Carts and Wagons (Ash and Dump)
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Lally, Patrick & Sons, 21 W. 1st St., South Boston, Mass.
Longenecker & Co., Chas., 150 Nassau St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Watson Wagon Co., Canastota, N. Y.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Carts (Concrete)
Archer Iron W'ks, Inc., 34th Pl. & Western Ave., Chicago.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burness Concrete Truck Co., Scarritt Bldg., Kansas City, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Foote Concrete Machinery Co., 184 La Salle St., Chicago.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lally, Patrick & Sons, 21 W. 1st St., South Boston, Mass.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Sterling Wheelbarrow Co., Milwaukee, Wis.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Castings (Iron)
American Cast-Iron Pipe Co., Birmingham, Ala.
American Ship Windlass Co., Providence, R. I.

Builders' Iron Foundry, Providence, R. I.
Chain Belt Co., Milwaukee, Wis.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Coldwell-Wilcox Co., Newburgh, N. Y.
Dimmick Pipe Co., Birmingham, Ala.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Douglas Geo. B., 29 Broadway, New York.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Du Bois Iron Works, Du Bois, Pa.
Flory, S., Mfg. Co., Bangor, Pa.
Fox & Co., John, 253 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hildreth Mfg. Co., 703 Sheridan St., Lansing, Mich.
Huron Steel & Iron Co., Norwalk, Ohio.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Massillon Iron & Steel Co., Massillon, Ohio.
McWane Pipe Works, Lynchburg, Va.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Morris Co., I. P., Philadelphia, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Phœnix Iron Works Co, Meadville, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Robins Conveying Belt Co., Passaic, N. J.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Sivyer Steel Casting Co., Milwaukee, Wis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N J.
U. S. Cast Iron Pipe & Foundry Co., 71 B'way, N. Y.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Castings (Malleable Iron)

Chain Belt Co., Milwaukee, Wis.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Du Bois Iron Works, Du Bois, Pa.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Janney Steinmetz & Co., Philadelphia, Pa.
Parsons Co., G. W., Observatory Bldg., Des Moines, Ia.
Star Expansion Bolt Co., 147 Cedar St., New York.
Union Iron Works, Hoboken, N. J.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Castings (Steel)

Chain Belt Co., Milwaukee, Wis.
Douglas, Geo. B., 29 Broadway, New York.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Du Bois Iron Works, Du Bois, Pa.
Goldschmidt Thermit Co., 90 West St., New York.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Janney Steinmetz & Co., Philadelphia, Pa.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Parsons Co., G. W., Observatory Bldg., Des Moines, Ia.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.

Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Union Iron Works, Hoboken, N. J.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Ceiling and Siding (Iron and Steel)
Farwell, Ozman, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Mullins Co., W. H., Salem, Ohio.

Cement
Alma Cement Co., Wellston, Ohio.
Alsens American Portland Cement Works, 45 B'way, N.Y.
American Cement Co., Pennsylvania Bldg., Phila., Pa.
Atlas Portland Cement Co., 30 Broad St., New York.
Chicago Portland Cement Co., 108 La Salle St., Chicago.
Clow, Jas B., & Sons, 350 Franklin St., Chicago, Ill.
Consolidated Rosendale Cement Co., 50 Church St., N.Y.
Continental Portland Cement Co., Syndicate Trust Bldg., St. Louis, Mo.
Coplay Cement Mfg. Co., Pennsylvania Bldg., Philadelphia, Pa.
Dexter Portland Cement Co, Philadelphia, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Edison Portland Cement Co., St. James Bldg., N. Y.
Fredensburg & Lounsbury, 289 Fourth Ave., New York.
French, Samuel H., & Co., Philadelphia, Pa.
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Glens Falls Portland Cement Co., Glens Falls, N. Y.
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Marquette Cement Mfg. Co., Marquette Bldg., Chicago.
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St. Louis Portland Cement Co., St. Louis, Mo.
Sandusky Portland Cement Co., Sandusky, Ohio.
Southern States Portland Cement Co., Rockmart, Ga.
Universal Portland Cement Co., Commercial Bank Bldg., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wadsworth, Howland & Co., 156 Fifth Ave., New York.
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Cement Block and Brick Machines
Anchor Concrete Stone Co., Rock Rapids, Ia.
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Burrell Mfg. Co., Bradley, Ill.
Cement Machinery Co., Jackson, Mich.
Century Cement Machine Co., Rochester, N. Y.
Conveying Weigher Co., 92 West St., New York.
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
Peerless Brick Machine Co., 18 N. Sixth St., Minneapolis.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Waterloo Cement Machinery Corporation, Waterloo, Ia.

Cement-Making Machinery
Allis-Chalmers Co., Milwaukee, Wis.
Anchor Concrete Stone Co., Rock Rapids, Ia.
Besser Mfg. Co., Alpena, Mich.
Cement Machinery Co., Jackson, Mich.

Conveying Weigher Co., 92 West St., New York.
Cummer & Son Co., F. D., Cleveland, Ohio.
Fuller Engineering Co., Allentown, Pa.
Hardsocg Co., Martin, Allegheny, Pa.
Kent Mill Co., 170 Broadway, New York.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Robins Conveying Belt Co., Passaic, N. J.
Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
Smidth & Co., F. L., 50 Church St., New York.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Vulcan Iron Works, Wilkes-Barre, Pa.
Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Cement Mixers

Abenaque Machine Works, Westminster St., Vt.
Atlas Dryer Co., Cleveland, Ohio.
Barber Asphalt Paving Co., Land Title Bldg., Phila., Pa.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Besser Mfg. Co., Alpena, Mich.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burrell Mfg. Co., Bradley, Ill.
Century Cement Machine Co., Rochester, N. Y.
Chain Belt Co., Milwaukee, Wis.
Collins Co., W. A., First Nat'l. Bk. Bldg., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dunning, W. D., Waters St., Syracuse, N. Y.
Eureka Machine Co, Lansing, Mich.
Foote Concrete Machinery Co., 184 La Salle St., Chicago.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kent Machine Co., Kent, Ohio.
Kingston Mfg. Co., Wilkes-Barre, Pa.
Koehring Machine Co., Milwaukee, Wis.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Municipal Engineering & Construction Co., Railway Exchange, Chicago, Ill.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Svenson-Shuman Machine Co., 602 Bessemer Bldg., Pittsburg, Pa.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Waterloo Cement Machinery Corporation, Waterloo, Ia.
Youngstown Car Mfg., Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cement (White)

Sandusky Portland Cement Co., Sandusky, Ohio.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Cement Testing Machines

Ainsworth, Wm., & Sons, Denver, Colo.
Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Fairbanks Co., Broome & Lafayette Sts., New York.
Ransome Concrete Machinery Co., Dunellen, N. J.

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Connelly, P. F., El Reno, Okla.
Vulcanite Portland Cement Co., Flatiron Bldg., N.

Cement Waterproofing
Barber Asphalt Paving Co., Maurer, N. J.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Glidden Varnish Co., Cleveland, Ohio.
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Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N.
Warner Co., Chas., Wilmington, Del.
Waterproofing Co., 147 E. 35th St., New York.

Cement Weighing Machines
Ainsworth, Wm. & Sons, Denver, Colo.
Fairbanks Co., Broome & Lafayette Sts., New York.
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Centers
Besser Mfg. Co., Alpena, Mich.
Blaw Collapsible Steel Centering Co., Pittsburg, Pa.
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Ransome Concrete Machinery Co., Dunellen, N. J.

Chains (Common)
Allis-Chalmers Co., Milwaukee, Wis.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, I
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Jones & Laughlin Steel Co., Pittsburg, Pa.
National Equipment Co., 276 Dearborn St., Chicago, I
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

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Bartlett, C. O., & Snow Co., Cleveland, Ohio.
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Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, I
Climax Road Machine Co., Marathon, N. Y.
Conveying Weigher Co., 92 West St., New York.
Cresson Co., Geo. V., Allegheny Ave., W. 17th S
Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Morse Chain Co., Ithaca, N. Y.
Sivyer Steel Castings Co., Milwaukee, Wis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Channelers
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old C
ony Bldg., Chicago, Ill.
Sullivan Machinery Co., Railway Exchange, Chicago, I
United States Equipment Co., 1201 Fisher Bldg., Chicago

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Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Johns-Manville Co., H. W., 100 William St., New York.

Chemists
Dow & Smith, 24 East 21st St., New York.
Fuller Engineering Co., Allentown, Pa.
Lehigh Valley Testing Laboratory, Allentown, Pa.
Lunkenheimer Co., Cincinnati, Ohio.
McKenna, C. F., Hudson Terminal, New York.

Chimneys (Concrete)
Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Custodis, Alphons, Chimney Construction Co., 95 Nassau St., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Weber Co., Marquette Bldg., Chicago, Ill.

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Custodis, Alphons, Chimney Construction Co., 95 Nassau St., New York.
Heinicke, H. R., 147 Fourth Ave., New York.

Chimneys (Steel)
Baldwin, William J., World Bldg., New York.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Cole Mfg. Co., R. D., Newnan, Ga.
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Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Petroleum Iron Works, Sharon, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.
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Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.

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Evens & Howard Fire Brick Co., St. Louis, Mo.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
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Griffiths Iron Works Co., 23d & Papin Sts., St. Louis, Mo.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.

Clamps and Clips (Wire-Rope)
American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Roebling's Sons Co., John A., Trenton, N. J.

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National Equipment Co., 276 Dearborn St., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Clevis Nuts
Pittsburgh Mfg. Co., Pittsburgh, Pa.

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Allis-Chalmers Co., Milwaukee, Wis.
Burrell Mfg. Co., Bradley, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

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Atlas Dryer Co., Cleveland, Ohio.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bergen Point Iron Works, 149 Broadway, New York.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Chain Belt Co., Milwaukee, Wis.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Conveying Weigher Co., 92 West St., New York.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
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Flory, S., Mfg., Co., Bangor, Pa.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hayward Co., 50 Church St., New York.
Heyl & Patterson, Inc., Pittsburg, Pa.
Hunt Co., C. W., West New Brighton, N. Y.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Robins Conveying Belt Co., Passaic, N. J.
Stuebner, G. L. Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
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Coal Tipples
American Bridge Co., of N. Y., 30 Church St., N. Y.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.

Decatur Bridge Co., Decatur, Ill.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C., Dept., Steelton, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Rogers Co., J. S., Moorestown, N. J.
Scaife & Sons Co., Wm. B., 221 First Ave., Pittsburg, Pa.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Wisconsin Bridge & Iron Co., N. Milwaukee, Wis.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Cofferdams

American Concrete Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
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Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Wilkins, Grant, Atlanta, Ga.

Colors, Mortar

Garry Iron & Steel Co., Coe & Lake Sts., Cleveland, Ohio.

Compressed-Air Tools

American Air Compressor Works, 26 Cortlandt St., N.Y.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Hardsocg Co., Martin, Allegheny, Pa.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Scaife & Sons Co., Wm. B., 221 First Ave., Pittsburg, Pa.
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Sullivan Machinery Co., Railway Exchange, Chicago, Ill.

Concrete Barrows

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bergen Point Iron Works, 149 Broadway, New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burness Concrete Truck Co., Scarritt Bldg., Kansas City, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koehring Machine Co., Milwaukee, Wis.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sterling Wheelbarrow Co., Milwaukee, Wis.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Toledo Wheelbarrow Co., Toledo, Ohio.
Union Iron Works, Hoboken, N. J.

Wallace Hoist Sales Co., Ft. Wayne, Ind.
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Zelnicker Supply Co., Walter A., St. Louis, Mo.

Concrete Block Machines

Besser Mfg. Co., Alpena, Mich.
Burrell Mfg. Co., Bradley, Ill.
Century Cement Machine Co., Rochester, N. Y.
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Peerless Brick Machine Co., 18 N. 6th St., Minneapolis, Minn.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Waterloo Cement Machinery Corporation, Waterloo, Ia.

Concrete Construction

Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
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Concrete Steel Co., 29 Broadway, New York.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Corrugated Bar Co., St. Louis, Mo.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
Ferro Concrete Construction Co., Cincinnati, Ohio.
Foundation Co., 115 Broadway, New York.
Freeborn Engineering & Construction Co., Scarritt Bldg., Kansas City, Mo.
Hennebique Construction Co., 1170 B'way, New York.
Hermann, Leibu, 11 Broadway, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hough Co., Wm., B., Monadnock Blk., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kidde, Walter, 140 Cedar St., New York.
Lindsay, W. W. & Co., Harrison Bldg., Philadelphia, Pa.
McCormick & Co., 14 S. Broad St., Philadelphia, Pa.
Overhead & Underground Construction Co., 2 Rector St., New York.
Page Woven Wire Fence Co., Adrian, Mich.
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Reinforced Concrete Pipe Co., Jackson, Mich.
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Rogers Co., J. S., Moorestown, N. J.
Standard Concrete Steel Co., 32d St. & E. R., New York.
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American Luxfer Prism Co., 42 Madison St., Chicago, Ill.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Buffalo Steel Co., Tonawanda, N. Y.
Canton Bridge Co., Canton, Ohio.
Collins Co., W. A., First Nat'l Bank Bldg., Chicago, Ill.
Concrete Steel Co., 29 Broadway, New York.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Corrugated Bar Co., St. Louis, Mo.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Ferro Concrete Construction Co., Cincinnati, Ohio.
Foundation Co., 115 Broadway, New York.
Freeborn Engineering & Construction Co., Scarritt Bldg., Kansas City, Mo.
Hennebique Construction Co., 1170 Broadway, New York.
Hermann, Leibu, 11 Broadway, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
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Pennsylvania Contracting Co., Publication Bldg., N. Y.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Ransome, Ernest L., 11 Broadway, New York.
Raymond Concrete Pile Co., 135 Adams St., Chicago, Ill.
Reinforced Concrete Pipe Co., Jackson, Mich.
Roebling Construction Co., Fuller Bldg., New York.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Truss Metal Lath Co., 147 Fourth Ave., New York.
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Tucker & Vinton, Terminal Bldg., New York.
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Wilkins, Grant, Atlanta, Ga.

Concrete Mixers

Abenaque Machine Works, Westminster Sta., Vt.
Barron, Jas. S., 133 Franklin St., New York.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Besser Mfg. Co., Alpena, Mich.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Concrete Mixer Co., Builders' Exchange, Buffalo, N. Y.
Burrell Mfg. Co., Bradley, Ill.
Century Cement Machine Co., Rochester, N. Y.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago Concrete Machinery Company, 335 Old Colony Bldg., Chicago, Ill.
Clover Leaf Machine Co., South Bend, Ind.
Collins Co., W. A., First Nat'l Bank Bldg., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Drake Standard Machine Works, 298 W. Jackson Blvd., Chicago, Ill.
Dunning, W. D., Waters St., Syracuse, N. Y.
Eureka Machine Co., Lansing, Mich.
Fairbanks Co., Broome & Lafayette Sts., New York.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Kent Machine Co., Kent, Ohio.
Kingston Mfg. Co., Wilkes-Barre, Pa.
Koehring Machine Co., Milwaukee, Wis.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Municipal Engineering & Construction Co., Railway Exchange, Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Nims Concrete Machinery Co., Philadelphia; Jefferson Co., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Snell, R. Z., Mfg., Co., South Bend., Ind.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Svenson-Shuman Machine Co., 602 Bessmer Bldg., Pittsburg, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wilcox Co., W. H., Binghamton, N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Concrete Reinforcement

American Rolling Mill Co., Middletown, Ohio.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
American System of Reinforcing, 189 La Salle St., Chicago, Ill.
Berger Mfg. Co., Canton, Ohio.
Buffalo Steel Co., Tonawanda, N. Y.
Calumet Steel Co., Com'l Nat'l Bank Bldg., Chicago, Ill.

Collins Co., W. A., First Nat'l Bank Bldg., Chicago, Ill.
Concrete Steel Co., 29 Broadway, New York.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Consolidated Expanded Metal Cos., 225 Fifth Ave., N. Y.
Corrugated Bar Co., St. Louis, Mo.
Hennebique Construction Co., 1170 B'way, New York.
Hermann, Leibu, 11 Broadway, New York.
Hough Co., Wm. B., Monadnock Bk., Chicago, Ill.
Hudson Structural Steel Co., 136th St. & Southern Boulevard, New York.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
Mississippi Valley Construction Co., Fullerton Bldg., St. Louis, Mo.
Northwestern Expanded Metal Co., Old Colony, Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Ransome, Ernest L., 11 Broadway, New York.
Reinforced Concrete Pipe Co., Jackson, Mich.
Roebling Construction Co., Fuller Bldg., New York.
Rogers-Shear Co., Warren, Pa.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.
Truss Metal Lath Co., 147 Fourth Ave., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Turner Construction Co., 11 Broadway, New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Concrete Waterproofing

American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Aquabar Co., The, 1228 Locust St., Philadelphia, Pa.
Barber Asphalt Paving Co., Maurer, N. J.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Elaterite Paint & Mfg. Co., Des Moines, Ia.
Foundation Co., 115 Broadway, New York.
Glidden Varnish Co., Cleveland, Ohio.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Knickerbocker Chemical Co., 24-26 Stone St., N. Y.
Miller & Co., C. L., 110 E. 23d St., New York.
Sandusky Portland Cement Co., Sandusky, Ohio.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Texas Co., 17 Battery Pl., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.
Waterproofing Co., 147 E. 35th St., New York.

Condensers

Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
American Ship Windlass Co., Providence, R. I.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Buffalo Steam Pump Co., Buffalo, N. Y.
Dean Bros., Steam Pump Co., Indianapolis, Ind.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Epping-Carpenter Co., Pittsburg, Pa.

International Steam Pump Co., 115 B'way, New York.
Knowles Steam Pump Works, 115 B'way, New York.
Lawrence Machine Co., Lawrence, Mass.
Morris Co., I. P., Philadelphia, Pa.
Osbun Co., B. M., Commercial National Bank Bldg., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Phœnix Iron Works Co., Meadville, Pa.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Union Steam Pump Co., Battle Creek, Mich.
Westinghouse Machine Co., Pittsburg, Pa.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Conduit Work

Overhead & Underground Construction Co., 2 Rector St., New York.

Conduits (Creosoted Wood)

Carbolineum Wood Preserving Co., 349 West Broadway, New York.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Conduits (Electric Wiring)

Fibre Conduit Co., Orangeburg, N. Y.
Star Expansion Bolt Co., 147 Cedar St., New York.

Conduits (Steel)

Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Lake Erie Engineering Works, Buffalo, N. Y.
Reinforced Concrete Pipe Co., Jackson, Mich.
Riter-Conley Mfg. Co., Pittsburg, Pa.

Conduits (Vitrified Clay)

Evens & Howard Fire Brick Co., St. Louis, Mo.
Johns-Manville Co., H. W., 100 William St., New York.
Warner Co., Chas., Wilmington, Del.

Contractors' (General)

Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
American Concrete Caisson Co., National State Bank Bldg., Troy, N. Y.
American Concrete Steel Co., Newark, N. J.
Asserson, Henry R., 59 Pearl St., New York.
Atlantic Gulf & Pacific Co., Park Row Bldg., New York.
Baltimore Bridge Co., Baltimore, Md.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Bradley & Co., Walter, Fulton, N. Y.
Canton Bridge Co., Canton, Ohio.
Champion Bridge Co., Wilmington, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Decatur Bridge Co., Decatur, Ill.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Dodge, J. M. Co., Nicetown, Philadelphia, Pa.
Field Barker & Underwood, Inc., Arcade Bldg., Philadelphia, Pa.

Foundation Co., 115 Broadway, New York.
Freeborn Engineering & Construction Co., Scarritt Bldg., Kansas City, Mo.
Geisel Construction Co., 620 Chestnut St., St. Louis, Mo.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hennebique Construction Co., 1170 Broadway, N. Y.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kidde, Walter, 140 Cedar St., New York.
McCormick & Co., 14 S. Broad St., Philadelphia, Pa.
Memphis Bridge Co., Memphis, Tenn.
New York Continental Jewell Filteration Co., Mills Bldg., New York.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Contracting Co., Publication Bldg., N. Y.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Raymond Concrete Pile Co., 135 Adams St., Chicago, Ill.
Rockport Granite Co., Rockport, Mass.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Standard Concrete-Steel Co., 32d St. & E. R., New York.
Stewart-Karbaugh-Shanley Co., 44th St., & Fifth Ave., New York.
Sundstrom & Stratton Co., 90 West St., New York.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wardwell, Frederick S., Stamford, Conn.
Warren Construction Co., Warren, Ohio.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., North Milwaukee, Wis.

Conveying Machinery

Allis-Chalmers Co., Milwaukee, Wis.
Atlas Dryer Co., Cleveland, Ohio.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Carson Trench Machine Co., 16 Dorrance St., Boston, Mass.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Conveying Weigher Co., 92 West St., New York.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Heyl & Patterson, Inc., Pittsburg, Pa.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.

National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Peerless V-Belt Co., 215 S. Clinton St., Chicago.
Power & Mining Machinery Co., Cudahy, Wis.
Robins Conveying Belt Co., Passaic, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Snare & Triest Co., 143 Liberty St., New York.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Union Iron Works, Hoboken, N. J.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Conveyors (Automatic Power)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Conveyors (Belt)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conveying Weigher Co., 92 West St., New York.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
National Belting Co., Lawrence, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Nims Concrete Machinery Co., Philadelphia; Jefferson Co., N. Y.
Robins Conveying Belt Co., Passaic, N. J.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Conveyors (Cable)

Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Bartlett C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Carson Trench Machine Co., 16 Dorrance St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Hunt Co., C. W., West New Brighton, N. Y.
Lambert Hoisting Engine Co., Newark, N. J.
Leschen & Sons Rope Co., A., St. Louis, Mo.
New York Cableway & Engineering Co., 1 Rector St., New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Conveyors (Chain)
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Power & Mining Machinery Co., Cudahy, Wis.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Conveyors (Trench Excavating)
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Carson Trench Machine Co., 16 Dorrance St., Boston, Mass.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kingston Mfg. Co., Wilkes-Barre, Pa.
Lambert Hoisting Engine Co., Newark, N. J.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.

Cooling Towers
Alberger Pump Co., 95 Liberty St., New York.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Graver, Wm., Tank Works, East Chicago, Ind.
Wheeler, C. H. Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.

Copper
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Cordage
American Mfg. Co., 65 Wall St., New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
National Equipment Co., 276 Dearborn St., Chicago, Ill.

Cornices
Berger Mfg. Co., Canton, Ohio.
Irwin, Thos. W., Mfg., Co., N. S. Pittsburg, Pa.
Lupton's Sons Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.
Mullins Co., W. H., Salem, Ohio.

Corporation Cocks
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Smith, A. P., Mfg. Co., Newark, N. J.
Water Works Equipment Co., 50 Church St., N. Y.

Couplings (Flange)
Allis-Chalmers Co., Milwaukee, Wis.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.

Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Smith, A. P., Mfg. Co., Newark, N. J.
Smith Co., S. Morgan, York, Pa.

Couplings (Friction Clutch)

Allis-Chalmers Co., Milwaukee, Wis.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jones & Laughlin Steel Co., Pittsburg, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Couplings (Large Pipe)

American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.

Couplings (Pipe)

American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Moran Flexible Steam Joint Co., Louisville, Ky.
Scully Steel & Iron Co., Chicago, Ill.

Couplings (Shaft)

Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo., V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Smith Co., S. Morgan, York, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Cranes and Hoists

Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Scully Steel & Iron Co., Chicago, Ill.
Shadegg Engine Co., 315 Third St. So. Minneapolis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Air)
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Northern Engineering Works, Detroit, Mich.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Derrick)
American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Bucyrus Co., S. Milwaukee, Wis.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hayward Co., 50 Church St., New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Williams, G. H., Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Electric)
Brown Hoisting Machinery Co., Cleveland, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Longenecker & Co., Chas., 150 Nassau St., New York.
Northern Engineering Works, Detroit, Mich.
Ransome Concrete Machinery Co., Dunellen, N. J.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Hand-Power)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Hydraulic)
Brown Hoisting Machinery Co., Cleveland, Ohio.
Northern Engineering Works, Detroit, Mich.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Jib)
Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Bucyrus Co., So. Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Whitehead & Kales Iron Works, Detroit, Mich.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Locomotive)
American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Browning Engineering Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Hough, Wm. B., Co., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Williams, G. H. Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Traveling)
Bartlett C. O. & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Browning Engineering Co., Cleveland, Ohio
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hayward Co., 50 Church St., New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Ransome Concrete Machinery Co., Dunellen, N. J.
Whitehead & Kales Iron Works, Detroit, Mich.
Williams, G. H., Co., Cleveland, Ohio.
Wonham ,Magor Car & Mfg. Co., 30 Church St., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Cranes (Wrecking)
Browning Engineering Co., Cleveland, Ohio.

Crayons (Marking)
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Creosote
Barrett Mfg. Co., 17 Battery Pl., New York.

Creosoting

American Creosoting Co., 29 Broadway, New York.
Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
Carbolineum Wood Preserving Co., 349 West Broadway, New York.
U. S. Wood Preserving Co., 29 Broadway, New York.

Creosoting Cylinders

Allis-Chalmers Co., Milwaukee, Wis.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Graver, Wm., Tank Works, East Chicago, Ind.
Petroleum Iron Works, Sharon, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Traylor Engineering Co., Allentown, Pa.

Crossings, Railway (See Frogs and Switches)

Crusher Castings (Rock)

Abenaque Machine Works, Westminister Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Coldwell-Wilcox Co., Newburgh, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Janney, Steinmetz & Co., Philadelphia, Pa.
Longenecker & Co., Chas., 150 Nassau St., New York.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.

Crushers (Jaw)

Allis-Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burrell Mfg. Co., Bradley, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago Concrete Machinery Co., 335 Old Colony Bldg., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Coldwell-Wilcox Co., Newburgh, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Galion Iron Works Co., Galion, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Janney, Steinmetz & Co., Philadelphia, Pa.
Kent Mill Co., 170 Broadway, New York.
Koehring Machine Co., Milwaukee, Wis.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.

Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sproul, Harvey B., Peekskill, N. Y.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago.
Universal Road Machinery Co., 120 Liberty St., N. Y.
Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Crushers (Gyratory)

Allis-Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Bradley Pulverizer Co., 92 State St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Longenecker & Co., Chas. 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Crushing Rolls

Allis-Chalmers Co., Milwaukee, Wis.
Bartlett C. O., & Snow Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin H. O., Equipment Co., Harvey, Ill.
Cresson, Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Hunt Co., C. W., West New Brighton, N. Y.
Kent Mill Co., 170 Broadway, New York.
Longenecker & Co., Chas., 150 Nassau St., New York.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.

Culverts

Besser Mfg. Co., Alpena, Mich.
Climax Road Machine Co., Marathon, N. Y.
Decatur Bridge Co., Decatur, Ill.
Evens & Howard Fire Brick Co., St. Louis, Mo.
Galion Iron Works Co., Galion, Ohio.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.,
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lock Joint Pipe Co., 165 Broadway, New York.
Parmley, Walter C., Everett Bldg., Union Sq., N. Y.
Reinforced Concrete Pipe Co., Jackson, Mich.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.

Cupolas
Evens & Howard Fire Brick Co., St. Louis, Mo.
Northern Engineering Works, Detroit, Mich.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Traylor Engineering Co., Allentown, Pa.

Curb Boxes (Meter)
Douglas, W. & B., Middletown, Conn.

Curb (Steel)
Carnegie Steel Co., Pittsburg, Pa.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.

Cutters (Rod and Bolt)
Buffalo Forge Co., Buffalo, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Scully Steel & Iron Co., Chicago, Ill.

Cylinders
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Builders' Iron Foundry, Providence, R. I.
Du Bois Iron Works, Du Bois, Pa.
East Jersey Pipe Co., 90 West St., New York.
Flint & Walling Mfg. Co., Kendallville, Ind.
Graver, Wm., Tank Works, East Chicago, Ind.
Huron Steel & Iron Co., Norwalk, Ohio.
Morris Co., I. P., Philadelphia, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.

Dams (Concrete)
Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
Ambursen Hydraulic Construction Co., 176 Federal St., Boston, Mass.
American Concrete Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Foundation Co., 115 Broadway, New York.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Pennsylvania Contracting Co., Publication Bldg., N. Y.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
White & Co., J. G., Inc., 43 Exchange Pl., New York.

Derails
Indianapolis Switch & Frog Co., Springfield, Ohio.
Wiener Co., Ernst, Fulton & Church Sts., New York.

Derrick Crabs
American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dake Engine Co., Grand Haven, Mich.
Dobbie Foundry & Machinery Co., Niagara Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.

McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Derrick Irons

American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Flory, S., Mfg. Co., Bangor, Pa.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hayward Co., 50 Church St., New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Williams, G. H., Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Derricks and Derrick Fittings

American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Browning, Victor R., & Co., Cleveland, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Flory, S. Mfg. Co., Bangor, Pa.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hayward Co., 50 Church St., New York.
Hough Co., Wm., B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
McCoy Co., Henry J., 67 Dey St., New York.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.

Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Williams, G. H., Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Derricks (Pile Driving)

American Hoist & Derrick Co., St. Paul, Minn.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Flory, S., Mfg. Co. Bangor, Pa.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Williams, G. H. Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Derricks (Steam)

American Hoist & Derrick Co., St. Paul, Minn.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Clyde Iron Works, Duluth, Minn.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hayward Co., 50 Church St., New York.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Williams, G. H., Co., Cleveland, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Dinkeys (See Locomotives, Industrial and Light)

Distillers

American Ship Windlass Co., Providence, R. I.
Williamson Bros. Co., Philadelphia, Pa.

Ditching Machinery, Steam Shovels, Etc. (See Excavating Machinery.)

Doors (Rolling)

Schreiber & Sons Co., L., Cincinnati, Ohio.
Wilson Mfg. Co., Jas. G., 3 West 29th St., New York.

Draft Dampers

Sturtevant, B. F., Co., Hyde Park, Mass.

Drafting Instruments and Supplies (See Engineers' and Surveyors' Instruments and Supplies)

Dredging Machinery

Atlantic Equipment Co., 30 Church St., New York.
Atlantic, Gulf & Pacific Co., Park Row Bldg., N. Y.
Bucyrus Co., So. Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W of 17th St., Philadelphia, Pa.
Hayward Co., 50 Church St., New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hobbs-Ives, Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Lambert Hoisting Engine Co., Newark, N. J.
Lawrence Machine Co., Lawrence, Mass.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Marion Steam Shovel Co., Marion, Ohio.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Morris Machine Works, Baldwinsville, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Osgood Dredge Co., Albany, N. Y.
Parsons Co., G. W., Observatory Bldg., Des Moines, Ia.
Shadegg Engine Co., 315 Third St. So., Minneapolis,
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Walker, John L., Mobile, Ala.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Drift Pins

Baltimore Bridge Co., Baltimore, Md.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.

Drilling Machines (Blast-Hole)

American Well Works, Aurora, Ill.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Keystone Driller Co., Beaver Falls, Pa.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sweeney & Gray, 81-5 Sixth St., Long Island City, N. Y.

Drilling Rope

American Mfg. Co., 65 Wall St., New York.
American Well Works, Aurora, Ill.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Sweeney & Gray, 81-5 Sixth St., Long Island City, N. Y.

Drills

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.

Fairbanks Co., Broome & Lafayette Sts., New York.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.
Star Expansion Bolt Co., 147 Cedar St., New York.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Drills (Diamond Core)
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Terry Core Drill Co., 50 Church St., New York.

Drills (Diamondless Core)
American Well Works, Aurora, Ills.
Ingersoll-Rand Co., 11 Broadway, New York.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Terry Core Drill Co., 50 Church St., New York.

Drills (Electric)
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Drills (Electric-Air) Rock
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Drills (Pneumatic)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Hardsocg Co., Martin, Allegheny, Pa.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Drills (Rock)
American Well Works, Aurora, Ill.
Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Hardsocg Co., Martin, Allegheny, Pa.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Drums (Hoisting)
Allis-Chalmers Co., Milwaukee, Wis.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
East Jersey Pipe Co., 90 West St., New York.
Fernyak & Stavenik Machine Co., Mansfield, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.

Lambert Hoisting Engine Co., Newark, N. J.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Power & Mining Machinery Co., Cudahy, Wis.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Williamson Bros. Co., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Dryers (Cement, Asphalt and Sand)
American Process Co., 68 William St., New York.
Atlas Dryer Co., Cleveland, Ohio.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cummer & Son Co., F. D., Cleveland, Ohio.
Fuller Engineering Co., Allentown, Pa.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Petroleum Iron Works, Sharon, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Traylor Engineering Co., Allentown, Pa.

Drying Apparatus (Hot-Blast)
American Blower Co., Detroit, Mich.
American Process Co., 68 William St., New York.
Atlas Dryer Co., Cleveland, Ohio.
Buffalo Forge Co., Buffalo, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
Sturtevant, B. F., Co., Hyde Park, Mass.

Dump Boxes
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Eagle Wagon Works, Auburn, New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Dump Wagons (See Wagons—Contractors)

Dust Collectors
American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Dynamite
Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Keystone Powder Mfg. Co., Emporium, Pa.

National Powder Co., 200 Fifth Ave., New York.
Sinnamahoning Powder Mfg. Co., Emporium, Pa.
Trojan Powder Co., 60 Wall St., New York.

Dynamos
Burke Electric Co., Erie, Pa.
De Laval Steam Turbine Co., Trenton, N. J.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
General Electric Co., Schenectady, N. Y.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Sturtevant, B. F., Co., Hyde Park, Mass.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Economizers (See Fuel Economizers)

Ejectors
American Injector Co., Detroit, Mich.
Lunkenheimer Co., Cincinnati, Ohio.

Electric Bells
Ostrander & Co., W. R., 22 Dey St., New York.

Electric Trucks
Hunt Co., C. W., West New Brighton, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Electrical Supplies
General Electric Co., Schenectady, N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Elevator Inclosures
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Star Expansion Bolt Co., 147 Cedar St., New York.
Whitehead & Kales Iron Works, Detroit, Mich.

Elevator Repairs
Goldschmidt Thermit Co., 90 West St., New York.

Elevators
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Northern Engineering Works, Detroit, Mich.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.

Elevators (Bucket)
Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.

Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Smith, T. L. Co., 305 Old Colony Bldg., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Elevators, Builders'

American Hoist & Derrick Co., St. Paul, Minn.
Burrell Mfg. Co., Bradley, Ill.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Chicago Concrete Machinery Co., 335 Old Colony Bldg., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
National Equipment C., 276 Dearborn St., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Engineering Books (See Books, Engineering and Technical)

Engineering Reports

Albright & Mebus, Land Title Bldg., Philadelphia, Pa.
American Concrete Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
American Engineering & Construction Co., Drexel Bldg., Philadelphia, Pa.
Baldwin, William J., World Bldg., New York.
Bryan, William H., Lincoln Trust Bldg., St. Louis, Mo.
Fuller Engineering Co., Allentown, Pa.
Grunsky, C. E., 45 Broadway, New York.
Kidde, Walter, 140 Cedar St., New York.
Potts, Clyde, 17 Battery Pl., New York.
Schott, W. H., 125 Monroe St., Chicago, Ill.
White & Co., J. G., Inc., 43 Exchange Pl., New York.

Engineers and Contractors

Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
Albright & Mebus, Land Title Bldg., Philadelphia, Pa.
Alvord, John W., 127 Hartford Bldg., Chicago, Ill.
Ambursen Hydraulic Construction Co., 176 Federal St., Boston, Mass.
American Bridge Co., of N. Y., 30 Church St., N. Y.
American Concrete Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
American Concrete Steel Co., Newark, N. J.
American Engineering & Construction Co., Drexel Bldg., Philadelphia, Pa.
American Pipe Mfg. Co., 112 N. Broad St., Philadelphia.
Arnold Co., 181 La Salle St., Chicago, Ill.
Asserson, Henry R., 59 Pearl St., New York.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.

Atlas Dryer Co., Cleveland, Ohio.
Baltimore Bridge Co., Baltimore, Md.
Barbour, F. A., Tremont Bldg., Boston, Mass.
Barrus, Geo. H., 12 Pemberton Sq., Boston, Mass.
Bates, Putnam A., 42 Broadway, New York.
Boycott, G. W. M., 19 Old Queen St., London, Eng.
Breite, W. W., Clunie Bldg., San Francisco, Cal.
Brill, George M., 1134 Marquette Bldg., Chicago, Ill.
Bryan, William H., Lincoln Trust Bldg., St. Louis, Mo.
Buff & Buff Mfg. Co., Boston, Mass.
Byllesby & Co., H. M., American Trust Bldg., Chicago, Ill.
Cameron Septic Tank Co., Monadnock Blk., Chicago, Ill.
Chain Belt Co., Milwaukee, Wis.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
City Wastes Disposal Co., 156 Fifth Ave., New York.
Clinton Bridge & Iron Works, Clinton, Ia.
Cole, John A. & Edw. S., 220 Broadway, New York.
Conard, Wm. R., Burlingon, N. J.
Concrete Steel Co., 29 Broadway, New York.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Dawley, Edwin P., Banigan Bldg., Providence, R. I.
Decatur Bridge Co., Decatur, Ill.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
D'Olier Engineering Co., 121 S. 11th St., Philadelphia, Pa.
Fanning, J. T., 330 Hennepin Ave., Minneapolis, Minn.
Farrington, Harvey, 45 Broadway, New York.
Ferro Concrete Construction Co., Cincinnati, Ohio.
Field, Barker & Underwood, Inc., Arcade Bldg., Philadelphia, Pa.
Field, William P., Prudential Bldg., Newark, N. J.
Foundation Co., 115 Broadway, New York.
Freeborn Engineering & Construction Co., Scarritt Bldg., Kansas City, Mo.
Fuertes, James H., 140 Nassau St., New York.
Fuller Engineering Co., Allentown, Pa.
Fuller, Frank L., 12 Pearl St., Boston, Mass.
Gray, Samuel M., Weybosset St., Providence, R. I.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Grunsky, C. E., 45 Broadway, New York.
Hallett, Nelson A., 1 Ashburton Pl., Boston, Mass.
Hazelhurst & Anderson, Candler Bldg., Atlanta, Ga.
Hazen, Allen, 103 Park Ave., New York.
Hering & Fuller, 170 Broadway, New York.
Hermann, Leibu, 11 Broadway, New York.
Hill, Nicholas S., Jr., 100 William St., New York.
Hill, W. R., 53 State St., Albany, N. Y.
Hirschberg-Williams-Washburn Co., 410 Stephenson Bldg., Milwaukee, Wis.
Iowa Engineering Co., Clinton, Ia.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kidde, Walter, 140 Cedar St., New York.
Kiersted, Wynkoop, Water Works Bldg., Kansas City, Mo.
Knight & Hopkins, Rome, N. Y.
Leavitt, Chas. W., Jr., 220 Broadway, New York.
Lederle & Provost, 39-41 W. 38th St., New York.
Lewis & Kitchen, 433 Wabash Ave., Chicago, Ill.
Longenecker & Co., Chas., 150 Nassau St., New York.
Lyndon, Lamar, 2 Rector St., New York.

Maury, Dabney H., 129 N. Jefferson Ave., Peoria, Ill.
McCormick & Co., 14 S. Broad St., Philadelphia, Pa.
McEnerney, C. L., Balboa Bldg., San Francisco, Cal.
Metcalf & Eddy, 14 Beacon St., Boson, Mass.
Meyer, Henry C., Jr., 1 Madison Ave., New York.
New York Blower Co., Stewart Ave., Chicago, Ill.
O'Rourke Engineering Construction Co., 345 Fifth Ave.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Owen, James, 196 Market St., Newark, N. J.
Phillips, Richard H., Security Bldg., St. Louis, Mo.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Potter, Alexander, 114 Liberty St., New York.
Potts, Clyde, 17 Battery Pl., New York.
Raymond Concrete Pile Co., 135 Adams St., Chicago, Ill.
Riggs & Sherman Co., The Nasby, Toledo, Ohio.
Riverside Bridge Co., Martin's Ferry, Ohio.
Rogers & Latimer, 5 East 42d St., New York.
Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, Ill.
Schott, W. H., 125 Monroe St., Chicago, Ill.
Shankland, E. C. & R. M., The Rookery, Chicago, Ill.
Skene, Frederick, 149 Broadway, New York.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Stewart-Karbaugh-Shanley Co., 44th St. & Fifth Ave., New York.
Stone & Webster Engineering Corporation, Stone & Webster Bldg., Boston, Mass.
Sundstrom & Stratton Co., 90 West St., New York.
Sweeney & Gray, 81-85 Sixth St., Long Island City, N. Y.
Thompson, Morgan H., 59 W. 65th St., New York.
Tribus & Massa, 86 Warren St., New York.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wallace & Co., Joseph H., Temple Court Bldg., N. Y.
Wardwell, Frederick S., Stamford, Conn.
Watson & Co., Wilbur J., Citizens Bldg., Cleveland.
Webster, A. L., 43-49 Exchange Pl., New York.
Weston, Edmond B., 86 Weybosset St., Providence, R. I.
Weston, Robert Spurr, 14 Beacon St., Boston, Mass.
Whipple, Geo. C., 103 Park Ave., New York.
Wilkins Grant, Atlanta, Ga.
Wilkins Co., William G., Westinghouse Bldg., Pittsburg, Pa.
Willoughby, A. B., The Bourse, Philadelphia, Pa.
Wilson, Harris & Richards, Drexel Bldg., Philadelphia.
Wingfield, Nisbet, N. 811 Ellis St., Augusta, Ga.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.
Wise & Watson, Passaic, N. J.

Engineers' and Surveyors' Instruments and Supplies

Ainsworth, Wm. & Sons, Denver, Col.
American Drafting Furniture Co., Rochester, N. Y.
Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Barron, Jas. S., 133 Franklin St., New York.
Bausch & Lomb Optical Co., Rochester, N. Y.
Berger, C. L. & Sons, 37 Williams St., Boston, Mass.
Buff & Buff Mfg. Co., Boston, Mass.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Fritz Mfg. Co., Grand Rapids, Mich.

Hanna Mfg. Co., Troy, N. Y.
Iszard-Warren Co., Inc., 1122 Vine S., Philadelphia, Pa.
Keuffel & Esser, Hoboken, N. J.
Kolesch & Co., 138 Fulton St., New York.
Lufkin Rule Co., Saginaw, Mich.
Prince, L. M., 108 W. 4th St., Cincinnati, Ohio.
Surveyors' Instrument Exchange Co., P. O. Box 943, Philadelphia, Pa.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Wiebusch & Hilger, Ltd., 106 Lafayette St., New York.
Williams, Brown & Earle, 918 Chestnut St., Phila., Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Engines (Blowing)
Allis-Chalmers Co., Milwaukee, Wis.
Dean Bros., Steam Pump Co., Indianapolis, Ind.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Ingersoll-Rand Co., 11 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.

Engines (Compressed Air)
Allis Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Dake Engine Co., Grand Haven, Mich.
Dow, Geo. E. Pumping Engine Co., San Francisco, Cal.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 B'way, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Northern Engineering Works, Detroit, Mich.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.

Engines (Corliss)
Allis-Chalmers Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Epping-Carpenter Co., Pittsburg, Pa.
International Steam Pump Co., 115 B'way, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.

Engines (Deep-Well Pumping)
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Fairbanks Co., Broome & Lafayette Sts., New York.
International Steam Pump Co., 115 B'way, New York.
Keystone Driller Co., Beaver Falls, Pa.
Mietz, August, 128 Mott St., New York.
Sweeney & Gray, 81-85 Sixth St., Long Island City, N.Y.

Union Steam Pump Co., Battle Creek, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Westinghouse Machine Co., Pittsburg, Pa.

Engines (Gas, Gasoline, Oil)

Abenaque Machine Works, Westminster Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Buckeye Engine Co., Salem, Ohio.
Buffalo Concrete Mixer Co., Builders Exchange, Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Du Bois Iron Works, Du Bois, Pa.
Erie Pump & Engine Co., Erie, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fernyak & Stavenik Machine Co., Mansfield, Ohio.
Flint & Walling Mfg. Co., Kendallville, Ind.
Foos Gas Engine Co., Springfield, Ohio.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hildreth Mfg. Co., 703 Sheridan St., Lansing, Mich.
Huron Steel & Iron Co., Norwalk, Ohio.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
International Steam Pump Co., 115 B'way, New York.
Lawrence Machine Co., Lawrence, Mass.
Mietz, August, 128 Mott St., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Meter Co., 84-86 Chambers St., New York.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Shadegg Engine Co., 315 Third St., So. Minneapolis.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Struthers-Wells Co., Warren, Pa.
Thompson, J., & Sons Mfg. Co., Beloit, Wis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Watson-Stillman Co., 50 Church St., New York.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Engines (High Duty—Pumping)

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dow, Geo. E., Pumping Engine Co., San Francisco.
Epping-Carpenter Co., Pittsburg, Pa.
International Steam Pump Co., 115 B'way, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Lawrence Machine Co., Lawrence, Mass.
Mietz, August, 128 Mott St., New York.
Morris Co., I. P., Philadelphia, Pa.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Thompson, J., & Sons Mfg. Co., Beloit, Wis.
Union Steam Pump Co., Battle Creek, Mich.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.

Engines (Hoisting)
Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Bond, Harold L., Co., 140 Pearl St., Boston, Mass.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dake Engine Co., Grand Haven, Mich.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Du Bois Iron Works, Du Bois, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fernyak & Stavenik Machine Co., Mansfield, Ohio.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Longenecker & Co., Chas., 150 Nassau St., N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Mietz, August, 128 Mott St., New York.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Ransome Concrete Machinery Co., Dunellen, N. J.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Machine Co., Pittsburg, Pa.
Williams, G. H., Co., Cleveland, Ohio.
Williamson Bros. Co., Philadelphia, Pa.
Wisconsin Engine Co., Corliss, Wis.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Engines (Hot Air)
Allis-Chalmers Co., Milwaukee, Wis.
Dake Engine Co., Grand Haven, Mich.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Flory, S., Mfg. Co., Bangor, Pa.
Rider-Ericsson Engineer Co., 35 Warren St., New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Engines (Oil)
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Mietz, August, 128 Mott St., New York.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Shadegg Engine Co., 315 Third St., So., Minneapolis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Machine Co., Pittsburg, Pa.

Engines (Portable)
Abenaque Machine Works, Westminster Sta., Vt.
American Well Works, Aurora, Ill.

Avery Co., Peoria, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Du Bois Iron Works, Du Bois, Pa.
Erie Pump & Engine Co., Erie, Pa.
Huber Mfg., Co., Marion, Ohio.
Lawrence Machine Co., Lawrence, Mass.
Leffel & Co., James, Springfield, Ohio.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Morris Machine Works, Baldwinsville, N. Y.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Shadegg Engine Co., 315 Third St., So., Minneapolis.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Thompson, J., & Sons Mfg. Co., Deloit, Wis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Machine Co., Pittsburg ,Pa.

Engines (Steam)

Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
American Well Works, Aurora, Ill.
Buckeye Engine Co., Salem, Ohio.
Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dake Engine Co., Grand Haven, Mich.
Erie Pump & Engine Co., Erie, Pa.
Fernyak & Stavenik Machine Co., Mansfield, Ohio.
Flory, S., Mfg. Co., Bangor, Pa.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Green Fuel Economizer Co., Matteawan, N. Y.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Hunt Co., C. W., West New New Brighton, N. Y.
International Steam Pump Co., 115 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Lawrence Machine Co., Lawrence, Mass.
Lawrence Pump & Engine Co., Lawrence, Mass.
Leffel & Co., James, Springfield, Ohio.
McIntosh, Seymour & Co., 50 Church St., New York.
Mietz, August, 128 Mott St., New York.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris Machine Works, Baldwinsville, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Phœnix Iron Works Co., Meadville, Pa.
Ransome Concrete Machinery Co., Dunellen, N. J.
Ridgway, Dynamo & Engine Co., Ridgway, Pa.
Surtevant, B. F., Co., Hyde Park, Mass.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Waterloo Cement Machinery Corporation, Waterloo, Ia.
Westinghouse Machine Co., Pittsburg, Pa.
Wisconsin Engine Co., Corliss, Wis.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Engines (Traction)
Avery Company, Peoria, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Huber Mfg. Co., Marion, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Mietz, August, 128 Mott St., New York.
New York Cableway & Engineering Co., 1 Rector St., New York.
Shadegg Engine Co., 315 Third St., So., Minneapolis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Engines (Traction—Gasoline)
Abenaque Machine Works, Westminster Sta., Vt.
Fairbanks Co., Broome & Lafayette Sts., New York.
International Steam Pump Co., 115 Broadway, New York.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Shadegg Engine Co., 315 Third St., So., Minneapolis.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Evaporators
American Ship Windlass Co., Providence, R. I.
Buffalo Forge Co., Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Excavating Machinery
Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Austin, F. C., Drainage Excavator Co., Railway Exchange, Chicago, Ill.
Browning Mfg. Co., Cleveland, Ohio.
Bucyrus Co., So. Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Hayward Co., 50 Church St., New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Marion Steam Shovel Co., Marion, Ohio.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Municipal Engineering & Contracting Co., Railway Exchange, Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Parsons Co., G. W., Observatory Bldg., Des Moines, Ia.
St. Paul Ditcher & Carrier Co., St. Paul, Minn.
Thew Automatic Shovel Co., Lorain, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Williams, G. H., Co., Cleveland, Ohio.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Exhaust Heads
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Burt Mfg. Co., Akron, Ohio.
Sturtevant, B. F., Co., Hyde Park, Mass.

Expanded Metal (See Fireproof Construction)

Expansion Joints

Alberger Pump Co., 95 Liberty St., New York.
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Miller & Co., C. L., 110 E. 23d St., New York.
Schott, W. H., 125 Monroe St., Chicago, Ill.

Exploders

Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington
Keystone Powder Mfg. Co., Emporium, Pa.
National Powder Co., 200 Fifth Ave., New York.
Sinnamahoning Powder Mfg. Co., Emporium, Pa.
Trojan Powder Co., 60 Wall St., New York.

Explosives

Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington
Keystone Powder Mfg. Co., Emporium, Pa.
National Powder Co., 200 Fifth Ave., New York.
Sinnamahoning Powder Mfg. Co., Emporium, Pa.
Trojan Powder Co., 60 Wall St., New York.

Eyes (Wire Rope)

Broderick & Bascom Rope Co., 805 N. Main St., St Louis, Mo.
Leschen & Sons Rope Co., A., St. Louis, Mo.
National Equipment Co., 276 Dearborn St., Chicago, Ill
Roebling's Sons Co., John A., Trenton, N. J.
Scully Steel & Iron Co., Chicago, Ill.

Fans

Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
Baldwin, William J., World Bldg., New York.
Buffalo Forge Co., Buffalo, N. Y.
General Electric Co., Schenectady, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St. Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill
Vulcan Iron Works, Wilkes-Barre, Pa.

Fans (Electric)

American Blower Co., Detroit, Mich.
Baldwin, William J., World Bldg., New York.
Buffalo Forge Co., Buffalo, N. Y.
D'Olier Engineering Co., 121 S. 11th St., Philadelphia, Pa
General Electric Co., Schenectady, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Fasteners (Sheeting Roofing)

Lupton's Sons Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.

Feed-Water Heaters

Alberger Pump Co., 95 Liberty St., New York.
Channon Co., H., Market & Randolph Sts., Chicago, Ill

Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
International Steam Pump Co., 115 B'way, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
National Pipe Bending Co., New Haven, Conn.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Phœnix Iron Works Co., Meadville, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Wheeler, C. H., Mfg Co., 18th & Lehigh Ave., Philadelphia, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Feed-Water Purifiers

Booth Co., L. M., 136 Liberty St., New York.
Jewell Engineering Co., Cable Bldg., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Phœnix Iron Works Co., Meadville, Pa.
Pittsburg Filter Mfg., Co., Farmers' Bank Bldg., Pittsburg, Pa.
Purification & Engineering Co., 52 Church St., N. Y.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.

Felt

Barrett Mfg. Co., 17 Battery Pl., New York.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Fence, Railing and Posts

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Anchor Post Iron Works, 15 Church St., New York.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Decatur Bridge Co., Decatur, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Page Woven Wire Fence Co., Adrian, Mich.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warren Construction Co., Warren, Ohio.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Filing Cases (Metal)

Berger Mfg. Co., Canton, Ohio.

Filters (Feed Water)

Booth Co., L. M., 136 Liberty St., New York.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Greer Filter Mfg. Co., Inc., Hartje Bldg., Pittsburg, Pa.
New York Continental Jewell Filteration Co., Mills Bldg., New York.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Pittsburg Filter Mfg. Co., Farmers' Bank Bldg., Pittsburg, Pa.
Purification & Engineering Co., 52 Church St., N. Y.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.

Filters (Rate-Controllers)

New York Continental Jewell Filteration Co., Mills Bldg., New York.
Norwood Engineering Co., Florence, Mass.

Pittsburg Filter Mfg. Co., Farmers' Bank Bldg., Pittsburg.
Simplex Valve & Meter Co., 112 No. Broad St., Philadelphia, Pa.

Filters (Water)

Booth Co., L. M., 136 Liberty St., New York.
Greer Filter Mfg. Co., Inc., Hartje Bldg., Pittsburg, Pa.
Jewell Engineering Co., Cable Bldg., Chicago, Ill.
Jewell Export Filter Co. 86 Weybosset St., Providence.
New York Continental Jewell Filteration Co., Mills Bldg., New York.
Norwood Engineering Co., Florence, Mass.
Pittsburg Filter Mfg. Co., Farmers' Bank Bldg., Pittsburg, Pa.
Purification & Engineering Co., 52 Church St., N. Y.
Roberts Filter Mfg. Co., 30th & Chestnut Sts., Philadelphia, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Sucro Filter Co., 42 Broadway, New York.

Filter Presses

International Con. Filter Press Co., Providence, R. I.
Moore, Samuel L., & Sons, Elizabeth, N. J.

Fire Brick and Fire Clay

Evens & Howard Fire Brick Co., St. Louis, Mo.
Good, Geo. S., Fire Brick Co., Patton, Cambria Co., Pa.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Robinson Clay Product Co., Flatiron Bldg., New York.
Warner Co., Chas., Wilmington, Del.

Fire Escapes (Steel)

Berlin Construction Co., Berlin, Conn.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Page Woven Wire Fence Co., Adrian, Mich.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.

Fire Extinguishers

Badger, E. B., & Sons Co., 63-75 Pitts St., Boston, Mass.
Johns-Manville Co., H. W., 100 William St., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Fireproof Construction

Berger Mfg. Co., Canton, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Collins Co., W. A., First Nat'l Bank Bldg., Chicago, Ill.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Roebling Construction Co., Fuller Bldg., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.

Fireproof Doors

Berger Mfg. Co., Canton, Ohio.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Lupton's Sons Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.
U. S. Fireproofing Co., 25 West 33d St., New York.
Wilson Mfg. Co., Jas. G., 3 West 29th St., New York.

UNIVERSITY OF CALIFORNIA

Fireproof Windows
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Lupton's Sons' Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.
Mullins & Co., W. H., Salem, Ohio.
Rendle, Arthur E., 18 West 34th St., New York.
U. S. Fireproofing Co., 25 West 33d St., New York.
Van Noorden Co., E., 944 Mass. Ave., Boston, Mass.

Fireproofing Materials
American Concrete Steel Co., Newark, N. J.
Berger Mfg. Co., Canton, Ohio.
Consolidated Expanded Metal Co's, 225 Fifth Ave., N. Y.
Corrugated Bar Co., St. Louis, Mo.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
National Fire Proofing Co., 115 Adams St., Chicago, Ill.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Roebling Construction Co., Fuller Bldg., New York.
Standard Concrete Steel Co., 32d St. & E. R., New York.
Star Expansion Bolt Co., 147 Cedar St., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
U. S. Fireproofing Co., 25 West 33d St., New York.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.

Fire Protection Supplies
"Jiffy" Fire Hose Rack Co., 727 Seventh Ave., N. Y.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.

Fixtures (Electric and Gas)
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Flanges
American Spiral Pipe W'ks, P. O. Box 485, Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Lunkenheimer Co., Cincinnati, Ohio.
Massillon Iron & Steel Co., Massillon, Ohio.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Walworth Mfg. Co., Boston, Mass.

Floor Plates
Builders' Iron Foundry, Providence R. I.
Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hunt Co., C. W., West New Brighton, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.

Floor Stands
Fairbanks Co., Broome & Lafayette Sts., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Flooring (Mastic)
American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Wadsworth Stone & Paving Co., Bessmer Bldg., Pittsburg, Pa.

Flue Linings
Evens & Howard Fire Brick Co., St. Louis, Mo.
Johns-Manville Co., H. W., 100 William St., New York.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Warner Co., Chas., Wilmington, Del.

Flumes (Steel)
Egleston, T. G., Ideal Bldg., Denver, Col.

Fly-Wheels
Allis-Chalmers Co., Milwaukee, Wis.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Huron Steel & Iron Co., Norwalk, Ohio.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Morris Co., I. P., Philadelphia, Pa.
Phœnix Iron Works Co., Meadville, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Traylor Engineering Co., Allentown, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Forges
American Stoker Co., 11 Broadway, New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
New York Blower Co., Stewart Ave., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Forging Machines
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Forgings (Steel)
American Spiral Pipe W'ks, P. O. Box 485, Chicago, Ill.
Carnegie Steel Co., Pittsburg, Pa.
Cleveland City Forge & Iron Co., Cleveland, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Huron Steel & Iron Co., Norwalk, Ohio.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Scaife & Sons Co., Wm. B., 221 First Ave., Pittsburg, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Williams & Co., J. H., 150 Hamilton Ave., Brooklyn, N. Y.

Forms (See Centers)

Foundations

Foundation Co., 115 Broadway, New York.
Jackson (Inc.), Geo. W., 179 W. Jackson Blvd., Chicago.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Pneumatic Caisson Co., Troy, N. Y.

Foundry Equipment and Supplies

American Stoker Co., 11 Broadway, New York.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Fairbanks Co., Broome & Lafayette Sts., New York.
Goldschmidt Thermit Co., 90 West St., New York.
Koppel Co., Arthur, Pittsburg, Pa.
Northern Engineering Works, Detroit, Mich.
Star Expansion Bolt Co., 147 Cedar St., New York.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Frogs and Switches (Ry)

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Douglas, G. B., 29 Broadway, New York.
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Fuel Economizers

American Blower Co., Detroit, Mich.
American Stoker Co., 11 Broadway, New York.
Green Fuel Economizer Co., Matteawan, N. Y.
Murphy Iron Works, Detroit, Mich.
Parker Boiler Co., Pennsylvania Bldg., Phila., Pa.
Sturtevant, B. F., Co., Hyde Park, Mass.

Furnaces (Garbage and Refuse)

Baldwin, William J., World Bldg., New York.
Phœnix Iron Works Co., Meadville, Pa.

Furnaces (Lead)

Bond Co., Harold, L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Power & Mining Machinery Co., Cudahy, Wis.
Smith, A. P., Mfg. Co., Newark, N. J.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Water Works Equipment Co., 50 Church St., New York.

Furnaces (Rivet)

Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Scully Steel & Iron Co., Chicago, Ill.

Furnaces (Smokeless)
American Stoker Co., 11 Broadway, New York.
Bryan, William H., Lincoln Trust Bldg., St. Louis, Mo.
Murphy Iron Works, Detroit, Mich.
Willoughby, A. B., The Bourse, Philadelphia, Pa.

Furniture and Office Fittings
American Drafting Furniture Co., Rochester, N. Y.
Kolesch & Co., 138 Fulton St., New York.

Fuse
Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington.
National Powder Co., 200 Fifth Ave., New York.
Trojan Powder Co., 60 Wall St., New York.

Garbage Crematories
International Con. Filter Press Co., 10 Weybosset St., Providence, R. I.
Lewis & Kitchen, 433 Wabash Ave., Chicago, Ill.
Power Specialty Co., 111 Broadway, New York.

Gas Compressors
American Well Works, Aurora, Ill.
Dallett Co., Thos. H., 23d & York Sts., Phila., Pa.
Davis-Bournonville Co., 88 West St., New York.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 Broadway, N. Y.
Janney Steinmetz & Co., Philadelphia, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Wisconsin Engine Co., Corliss, Wis.

Gas Exhausters
American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Gas Holders
Graver, Wm., Tank Works, East Chicago, Ind.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Petroleum Iron Works, Sharon, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Wood & Co., R. D., 400 Chestnut St., Phila., Pa.

Gas Machinery
Davis-Bournonville Co., 88 West St., New York.
International Steam Pump Co., 115 Broadway, N. Y.
Moore, Sam'l L., & Sons Co., Elizabeth, N. J.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Gas Producers
Allis-Chalmers Co., Milwaukee, Wis.
American Stoker Co., 11 Broadway, New York.
Du Bois Iron Works, Du Bois, Pa.
Foos Gas Engine Co., Springfield, Ohio.
International Steam Pump Co., 115 B'way, New York.
Laidlaw-Dunn-Gordon Co., 115 B'way, New York.

McNeil & Bros. Co., James, Pittsburg, Pa.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Struthers-Wells Co., Warren, Pa.
Thompson, J., & Sons Mfg. Co., Beloit, Wis.
Westinghouse Machine Co., Pittsburg, Pa.
Wood & Co., R. D., 400 Chestnut St., Phila., Pa.

Gas Scrubbers

Buffalo Forge Co., Buffalo, N. Y.
Du Bois Iron Works, Du Bois, Pa.
Graver, Wm., Tank Works, East Chicago, Ind.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Southwark Foundry & Machinery Co., Philadelphia, Pa.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Gas Works Construction

Evens & Howard Fire Brick Co., St. Louis, Mo.
Pneumatic Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Schott, W. H., 125 Monroe St., Chicago, Ill.
Star Expansion Bolt Co., 147 Cedar St., New York.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Gaskets

American District Steam Co., Lockport, New York.
Channon Co., H., Market & Randolph St., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Detroit Leather Specialty Co., Inc., 50 Beecher Ave., Detroit, Mich.
Jenkins Bros., 71 John St., New York.
Johns-Manville Co., H. W., 100 William St., New York.
Power Specialty Co., 111 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Gaskets (Copper)

American District Steam Co., Lockport, New York.
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Power Specialty Co., 111 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Gates and Valves

American District Steam Co., Lockport, New York.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
Egleston, T. G., Ideal Bldg., Denver, Col.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fox & Co., John, 253 Broadway, New York.
Lunkenheimer Co., Cincinnati, Ohio.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power Specialty Co, 111 Broadway, New York.

Smith, A. P., Mfg. Co., Newark, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Water Works Equipment Co., 50 Church St., N. Y.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Gates (Iron Entrance)
Anchor Post Iron Works, 15 Church St., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Page Woven Wire Fence Co., Adrian, Mich.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Stewart Iron Works Co., Cincinnati, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.

Gates (Ore Bin)
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Burrell Mfg. Co., Bradley, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Power & Mining Machinery Co., Cudahy, Wis.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Traylor Engineering Co., Allentown, Pa.

Gates (Sluice), (See Sluice Gates)

Gauges (Loss of Head and Rate of Flow)
Simplex Valve & Meter Co., 112 N. Broad St., Phila., Pa.

Gauges (Steam), (See Steam Specialties)

Gauges (Track)
Fairbanks Co., Broome & Lafayette Sts., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Koppel Co., Arthur, Pittsburg, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Gears
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Leffel & Co, James, Springfield, Ohio.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris Co., I. P., Philadelphia, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Sivyer Steel Casting Co., Milwaukee, Wis.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Generators (Electric)
Allis-Chalmers Co, Milwaukee, Wis.
American Blower Co., Detroit, Mich.
Burke Electric Co., Erie, Pa.
De Laval Steam Turbine Co., Trenton, N. J.
D'Olier Engineering Co., 121 S. 11th St., Philadelphia, Pa.
General Electric Co., Schenectady, N. Y.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Sturtevant, B. F., Co., Hyde Park, Mass.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Westinghouse Elec, & Mfg. Co., Pittsburg, Pa.

Giants, Hydraulic
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.

Governors (Water-Wheel)
Allis-Chalmers Co., Milwaukee, Wis.
Morris Co., I. P., Philadelphia, Pa.
Standard Water Meter Co., 245 Robinson St., B'klyn, N.Y.

Graders and Scrapers, Earth (See Road Machinery)

Grain Elevators and Storage Tanks
American Bridge Co., of N. Y., 30 Church St., New York.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Graver, W., Tank Works, East Chicago, Ind.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Petroleum Iron Works, Sharon, Pa.
Riter-Conley Mfg. Co., Pittsburgh, Pa.
Steel Storage & Elevator Construction Co., Buffalo, N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Warren Construction Co., Warren, Ohio.

Grain Elevator Builders
Bartlett C. O., & Snow Co., Cleveland, Ohio.
Chain Belt Co., Milwaukee, Wis.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Warren Construction Co., Warren, Ohio.

Graphite
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dixon Crucible Co., Joseph, Jersey City, N. J.

Grates
Green Engineering Co., 115 Adams St., Chicago, Ill.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Thompson, J., & Sons Mfg. Co., Beloit, Wis.
Traylor Engineering Co., Allentown, Pa.
Willoughby, A. B., The Bourse, Philadelphia, Pa.

Gravel-Roofing
American Asphaltum & Rubber Co., 600-699 The Harvester Bldg., Chicago, Ill.
Barrett Mfg. Co., 17 Battery Pl., New York.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Warren Ehret Co., Land Title Bldg., Philadelphia, Pa.

Gravity Incline Machines
New York Cableway & Engineering Co., 1 Rector St., New York.

Greases (See Lubricants)

Grinding & Mixing Machinery
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Besser Mfg. Co., Alpena, Mich.
Bradley Pulverizer Co., 92 State St., Boston, Mass.
Builders' Iron Foundry, Providence, R. I.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conveying Weigher Co., 92 West St., New York.
Dunning, W. D., Waters St., Syracuse, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Kent Mill Co, 170 Broadway, New York
Power & Mining Machinery Co., Cudahy, Wis.

Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smidth & Co., F. L., 50 Church St., New York.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Hammers

Bond, Harold L., Co., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Scully Steel & Iron Co., Chicago, Ill.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.

Hand Cars

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Haiss, Geo. Mfg. Co., 138th St. & Rider Ave., N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Hangers (Joist)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Star Expansion Bolt Co., 147 Cedar St., New York.

Heads (Flanged and Dished Boiler)

Lake Erie Engineering Works, Buffalo, N. Y.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Heaters (Air)

American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Green Fuel Economizer Co., Matteawan, N. Y.
Sturtevant, B. F., Co., Hyde Park, Mass.

Heaters (Electric)

Chicago House Wrecking Co., 35th & Iron Sts., Chicago.
General Electric Co., Schenectady, N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Heaters (Feed-Water), (See Feed-Water Heaters)

Heating and Ventilating Machinery

American Blower Co., Detroit, Mich.
Baldwin, William J., World Bldg., New York.
Buffalo Forge Co., Buffalo, N. Y.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago.
Hitchings & Co., 1170 Broadway, New York.
New York Blower Co., Stewart Ave., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

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Hoist and Grab Hooks

Allis-Chalmers Co., Milwaukee, Wis.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Lake Erie Engineering Works, Buffalo, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.

Hoisting Rope

American Hoist & Derrick Co., St. Paul, Minn.
American Mfg. Co., 65 Wall St., New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Byers, Jno. F., Machine Co., Ravenna Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lescher & Sons Rope Co., A., St. Louis, Mo.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Hoists (Chain and Rope)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Browning, Victor R., & Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Dake Engine Co., Grand Haven, Mich.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hobbs-Ives, Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Power & Mining Machinery Co., Cudahy, Wis.
Scully Steel & Iron Co., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Hoists (Electric)

Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Browning, Victor R., & Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph St., Chicago, Ill.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Flory, S., Mfg. Co., Bangor, Pa.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.

Longenecker & Co., Chas., 150 Nassau St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Hoists (Gasoline)

Abenaque Machine Works, Westminster Sta., Vt.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Du Bois Iron Works, Du Bois, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Foos Gas Engine Co., Springfield, Ohio.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hildreth Mfg. Co., 703 Sheridan St., Lansing, Mich.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Janney, Steinmetz & Co., Philadelphia, Pa.
Koehring Machine Co., Milwaukee, Wis.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Mietz, August, 128 Mott St., New York.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Hoists (Hand)

Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Coldwell-Wilcox Co., Newburgh, N. Y.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.

Hoists (Head Gate)

Brown Hoisting Machinery Co., Cleveland, Ohio.
Coldwell-Wilcox Co., Newburgh, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.

Hoists (Pneumatic)

Brown Hoisting Machinery Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dake Engine Co., Grand Haven, Mich.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.

Ingersoll-Rand Co., 11 Broadway, New York.
Northern Engineering Works, Detroit, Mich.
Scully Steel & Iron Co., Chicago, Ill.

Hoists (Steam)

Abenaque Machine Works, Westminster Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Browning, Victor R., & Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dake Engine Co., Grand Haven, Mich.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Flory, S., Mfg. Co., Bangor, Pa.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hough Co., Wm. B., Monadnock Bldg., Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
McCoy Co., Henry J., 67 Dey St., New York.
Mead-Morrison Mfg. Co., Cambridge, Mass.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Williams, G. H., Co., Cleveland, Ohio.
Williamson Bros. Co., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Hooks (Wire Rope)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Roebling's Sons Co., John A., Trenton, N. J.
Scully Steel & Iron Co., Chicago, Ill.

Hose

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Hose Attachments

Channon Co., H., Market & Randolph Sts., Chicago. Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadephia, Pa.

Hose Couplings

Allis-Chalmers Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Hose (Protected)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.

Hose Racks
"Jiffy" Fire Hose Rack Co., 727 Seventh Ave., N. Y.

Hydrants
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Douglas, W. & B., Middletown, Conn.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fox & Co., John, 253 Broadway, New York.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Norwood Engineering Co., Florence, Mass.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Smith, A. P., Mfg., Co., Newark, N. J.
Water Works Equipment Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Hydraulic Leather Packings
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Detroit Leather Specialty Co., Inc., 50 Beecher Ave., Detroit, Mich.
Dudgeon, Richard, 24 Columbia St., New York.
Goulds Mfg. Co., Seneca Falls, N. Y.
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Ice and Refrigerating Machinery
Brown Hoisting Machinery Co., Cleveland, Ohio.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Traylor Engineering Co., Allentown, Pa.
York Mfg. Co., York, Pa.

Incline Cableway Engines
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Conklin, H. O., Equipment Co., Harvey, Ill.
Flory, S., Mfg. Co., Bangor, Pa.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Indicator Posts

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Pittsburgh Mfg. Co., Pittsburgh, Penna.

Induced Draft Equipment

American Blower Co., Detroit, Mich.
American Stoker Co., 11 Broadway, New York.
Buffalo Forge Co., Buffalo, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Injectors

American Injector Co., Detroit, Mich.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jenkins Bros., 71 John St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati.

Inspection of Materials

Buff & Buff Mfg. Co., Boston, Mass.
Conard, Wm. R., Burlington, N. J.
Dow & Smith, 24 E. 21st St., New York.
Hunt & Co., Robert W., Monongahela Bank Bldg., Pittsburg, Pa.
Lehigh Valley Testing Laboratory, Allentown, Pa.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
White & Co., J. G., Inc., 43 Exchange Pl., New York.

Instruments, Engineering, Surveying and Mathematical (See Engineers' and Surveyors' Instruments and Supplies)

Insurance

Ætna Life Insurance Co., Hartford, Conn.
Contractors' & Builders' Insurance Agency, Inc., Richmond, Va.
Ritch, William T., Inc., 1123 Broadway, New York.

Iron (Corrugated)

Baltimore Bridge Co., Baltimore, Md.
Berger Mfg. Co., Canton, Ohio.
Berlin Construction Co., Berlin, Conn.
Canton Bridge Co., Canton, Ohio.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Inland Steel Co., First National Bank Bldg., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Mississippi Valley Construction Co., Fullerton Bldg., St. Louis, Mo.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Iron Fence and Railings

Anchor Post Iron Works, 15 Church St., New York.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Canton Bridge Co., Canton, Ohio.
Decatur Bridge Co., Decatur, Ill.
Douglas, G. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Stewart Iron Works Co., Cincinnati, Ohio.
Tidewater Iron W'ks, 8th & Jefferson Sts, Hoboken, N. J.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.

Iron (Sheet)

Berger Mfg. Co., Canton, Ohio.
Douglas, Geo. B., 29 Broadway, New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Inland Steel Co., First National Bank Bldg., Chicago, Ill.
Janney, Steinmetz & Co., Philadelphia, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Whitehead & Kales Iron Works, Detroit, Mich.

Ironwork (Architectural and Ornamental)

Anchor Post Iron Works, 15 Church St., New York.
American Bridge Co., of N. Y., 30 Church St., N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Berger Mfg. Co., Canton, Ohio.
Berlin Construction Co., Berlin, Conn.
Brooks & Co., T. H., Cleveland, Ohio.
Champion Bridge Co., Wilmington, Ohio.
Clinton Bridge & Iron Works, Clinton, Ia.
Dahlstrom Metallic Door Co. Jamestown, N. Y.
Decatur Bridge Co., Decatur, Ill.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Douglas, Geo. B., 29 Broadway, New York.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Glidden Varnish Co., Cleveland, Ohio.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hudson Structural Steel Co., 136th St. & Southern Blvd., New York.
Irwin Thos. W. Mfg. Co., N. S. Pittsburg, Pa.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kenwood Bridge Co., First National Bank Bldg., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Lupton's Sons Co., David, Allegheny Ave. & Witte St., Philadelphia, Pa.
Memphis Bridge Co., Memphis, Tenn.
Milwaukee Bridge Co., Milwaukee, Wis.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Mullins Co., W. H., Salem, Ohio.
Noelke-Richards Iron Works, Indianapolis, Ind.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Rendle, Arthur E., 18 W. 34th St., New York.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Snare & Triest Co., 143 Liberty St., New York.
Stewart Iron Works Co., Cincinnati, Ohio.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.

Irrigation

Allis-Chalmers Co., Milwaukee, Wis.
American Engineering & Construction Co., Drexel Bldg., Philadelphia, Pa.

Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Austin, F. C., Drainage Excavator Co., Railway Exchange, Chicago, Ill.
Morris Machine Works, Baldwinsville, N. Y.
Municipal Engineering & Contracting Co., Railway Exchange, Chicago, Ill.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
White & Co., J. G., Inc., 43 Exchange Pl., New York.

Irrigation Supplies

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Builders' Iron Foundry, Providence, R. I.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
De Laval Steam Turbine Co., Trenton, N. J.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis.
Janney, Steinmetz & Co., Philadelphia, Pa.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Massillon Iron & Steel Co., Massillon, Ohio.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Star Expansion Bolt Co., 147 Cedar St., New York.

Jacks (Screw and Lever)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Duff Mfg. Co., N. S., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Jacks (Hydraulic)

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dudgeon, Richard, 24 Columbia St., New York.
Duff Mfg. Co., N. S., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Watson-Stillman Co., 50 Church St., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Jacks (Pneumatic)

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Duff Mfg. Co., N. S., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Northern Engineering Works, Detroit, Mich.
Scully Steel & Iron Co., Chicago, Ill.
Watson-Stillman Co., 50 Church St., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Jacks (Screw)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cleveland City Forge & Iron Co., Cleveland, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Duff Mfg. Co., N. S. Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Jacks (Track)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Duff Mfg. Co., N. S., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Joints (Expansion, Copper)
American District Steam Co., Lockport, New York.
Badger, E. B., & Sons Co., 63-75 Pitts St., Boston, Mass.
Coldwell-Wilcox, Co., Newburgh, N. Y.
Power Specialty Co., 111 Broadway, New York.

Joints (Flexible)
American District Steam Co., Lockport, N. Y.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Coldwell-Wilcox Co., Newburgh, N. Y.
Moran Flexible Steam Joint Co., 149 Third St., Louisville, Ky.
Power Specialty Co., 111 Broadway, New York.
Walker Mfg. Co., Fenton, Mich.

Kettles (Melting)
Barber Asphalt Paving Co., Land Title Bldg., Phila., Pa.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Graver, Wm., Tank Works, East Chicago, Ind.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Riter-Conley Mfg. Co., Pittsburgh, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.
Traylor Engineering Co., Allentown, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.

Kettles (Steam Jacket)
Badger, E. B., & Sons Co., 63-75 Pitts St., Boston, Mass.
Channon Co., H., Market & Randolph St., Chicago, Ill.
Graver, Wm., Tank Works, East Chicago, Ind.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Petroleum Iron Works, Sharon, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Traylor Engineering Co., Allentown, Pa.
Walsh's Holyoke Steam Boiler Works, Holyoke, Mass.

Kilns
American Blower Co., Detroit, Mich.
Graver, Wm., Tank Works, East Chicago, Ind.
Power & Mining Machinery Co., Cudahy, Wis.

Kilns (Cement)
Allis-Chalmers Co., Milwaukee, Wis.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Kilns (Drying)
Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Buffalo Forge Co., Buffalo, N. Y.
Burrell Mfg. Co., Bradley, Ill.
Cummer & Son Co., F. D., Cleveland, Ohio.
Power & Mining Machinery Co., Cudahy, Wis.
Sturtevant, B. F., Co., Hyde Park, Mass.
Vulcan Iron Works, Wilkes-Barre, Pa
Youngstown Car Mfg. Co., Youngstown, Ohio.

Kilns (Lime)
Allis-Chalmers Co., Milwaukee, Wis.
Graver, Wm., Tank Works, East Chicago, Ind.
Power & Mining Machinery Co., Cudahy, Wis.
Vulcan Iron Works, Wilkes-Barre, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Kominuters
Raymond Bros., Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smidth & Co., F. L., 50 Church St., New York.

Labor Bureau
International Brotherhood of Steam Shovel & Dredge Men, 134 Monroe St., Chicago, Ill.

Ladles (Foundry)
Channon Co., H., Market & Randolph St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Lake Erie Engineering Works, Buffalo, N. Y.
McNeil & Bros. Co., James, Pittsburg, Pa.
Morris Co., I. P., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Ladles (Foundry Car)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Northern Engineering Works, Detroit, Mich.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Ladles (Steel)
Fairbanks Co., Broome & Lafayette Sts., New York.
Lake Erie Engineering Works, Buffalo, N. Y.

McNeil & Bros. Co., James,, Pittsburg, Pa.
Northern Engineering Works, Detroit, Mich.
Petroleum Iron Works, Sharon, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburgh, Pa.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Lamp Posts
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fox & Co., John, 253 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Stewart Iron Works Co., Cincinnati, Ohio.

Lamps (Arc and Incandescent)
General Electric Co, Schenectady, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Lath (Metal)
American Rolling Mill Co., Middletown, Ohio.
Berger Mfg. Co., Canton, Ohio.
Clinton Wire Cloth Co., 1 Madison Ave., New York.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Roebling Construction Co., Fuller Bldg., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Leadite
Leadite Co., Inc., 1232 Land Title Bldg., Philadelphia, Pa.
Water Works Equipment Co., 50 Church St., New York.

Lead-Wool
United Lead Co., 111 Broadway, New York.
Water Works Equipment Co., 50 Church St., New York.

Levels
Ainsworth, Wm., & Sons, Denver, Col.
Architects & Engineers Supply Co., 1010 Grand Ave., Kansas City, Mo.
Bausch & Lomb Optical Co., Rochester, N. Y.
Berger, C. L., & Sons, 37 Williams St., Boston, Mass.
Buff & Buff Mfg. Co., Boston, Mass.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hanna Mfg. Co., Troy, N. Y.
Iszard-Warren Co., Inc., 1122 Vine St., Philadelphia, Pa.
Keuffel & Esser Co., 127 Fulton St., New York.
Kolesch & Co., 138 Fulton St., New York.
Prince, L. M., 108 W. 4th St., Cincinnati, Ohio.
Surveyors' Instrument Exchange, Box 943, Phila., Pa.
Williams, Brown & Earle, 918 Chestnut St., Phila., Pa.

Levels (Track)
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Fairbanks Co., Broome & Lafayette Sts., New York.

Lifting Magnets
Browning Engineering Co., Cleveland, Ohio.

Lighthouse Foundations
American Concrete Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Foundation Co., 115 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Pneumatic Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Wilkins, Grant, Atlanta, Ga.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.

Lights (Contractors')
McCoy Co., Henry J., 67 Dey St., New York.
Wells Light Mfg. Co., 14 Church St., New York.

Lights (Sidewalks and Vault), (See Skylights)

Lime
National Lime & Stone Co., Carey, Ohio.
Warner Co., Chas., Wilmington, Del.

Lime (Hydrated)
National Lime & Stone Co., Carey, Ohio.
Warner Co., Chas., Wilmington, Del.

Lockers
Berger Mfg. Co., Canton, Ohio.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Stewart Iron Works Co., Cincinnati, Ohio.
U. S. Fireproofing Co., 25 W. 33d St., New York.

Locomotives (Compressed Air)
Ingersoll-Rand Co., 11 Broadway, New York.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Locomotives (Electric)
General Electric Co., Schenectady, N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Locomotives (Gasoline)
Conklin, H. O., Equipment Co., Harvey, Ill.
Du Bois Iron Works, Du Bois, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Locomotives (Industrial and Light)
American Locomotive Co., 30 Church St., New York.
Atlantic Equipment Co., 30 Church St., New York.
Conklin, H. O., Equipment Co., Harvey, Ill.
Davenport Locomotive Works, Davenport, Ia.
Douglas, Geo. B., 29 Broadway, New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Lima Locomotive & Machine Co., Lima, Ohio.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Vulcan Iron Works, Wilkes-Barre, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Locomotives (Steam)

American Locomotive Co., 30 Church St., New York.
Atlantic Equipment Co., 30 Church St., New York.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dallett & Co., 611 Harrison Bldg., Philadelphia, Pa.
Davenport Locomotive Works, Davenport, Iowa.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lima Locomotive & Machine Co., Lima, Ohio.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Locomotives (Traction)

Huber Mfg. Co., Marion, Ohio.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Logging Outfits

Brown Hoisting Machinery Co., Cleveland, Ohio.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Clyde Iron Works, Duluth, Minn
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Flory, S., Mfg. Co., Bangor, Pa.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Lambert Hoisting Engine Co., Newark, N. J.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
Williamson Bros. Co., Philadelphia, Pa.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Log Loaders

Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Clyde Iron Works, Duluth, Minn.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Flory, S., Mfg. Co., Bangor, Pa.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.

Marion Steam Shovel Co., Marion, Ohio.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Lubricants

Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conveying Weigher Co., 92 West St., New York.
Dixon Crucible Co., Joseph, Jersey City, N. J.
Leschen & Sons Rope Co., A., St. Louis, Mo.

Lubricators

American Injector Co., Detroit, Mich.
Greene, Tweed & Co., 109 Duane St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Powell C., Wm., 2525 Spring Grove Ave., Cincinnati,

Lumber (Creosoted)

American Creosoting Co., 29 Broadway, New York.
Barber Asphalt Paving Co., Maurer, N. J.
Carbolineum Wood Preserving Co., 349 West Broadway, New York.
Fairbanks Co., Broome & Lafayette Sts., New York.
Gulfport Creosoting Co., Gulfport, Miss.
U. S. Wood Preserving Co., 29 Broadway, New York.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Machine Tools

Builders' Iron Foundry, Providence, R. I.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Davis-Bournonville Co., 88 West St., New York.
Fairbanks Co., Broome & Lafayette Sts., New York.
Lea Equipment Co., West Street Bldg., N. Y.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.

Machinery, Second-Hand (See Second-Hand Machinery and Supplies)

Machinists and Founders

Allis Chalmers Co., Milwaukee, Wis.
American Ship Windlass Co., Providence, R. I.
Builders' Iron Foundry, Providence, R. I.
Chain Belt Co., Milwaukee, Wis.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Phœnix Iron Works Co., Meadville, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
Sweeney & Gray, 81 Sixth St., Long Island City, N. Y.
Walker Mfg. Co., Fenton, Mich.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Manganese Steel
Carnegie Steel Co., Pittsburg, Pa.
Chain Belt Co., Milwaukee, Wis.
Douglas, Geo. B., 29 Broadway, New York.
Huron Steel & Iron Co., Norwalk, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Longenecker & Co., Chas., 150 Nassau St., New York.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., New York.
Sivyer Steel Casting Co., Milwaukee, Wis.

Manhole Covers
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Builders' Iron Foundry, Providence, R. I.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coldwell-Wilcox Co., Newburgh, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fox & Co., John, 253 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Lake Erie Engineering Works, Buffalo, N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
Phœnix Iron Works Co., Meadville, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Marble (Workers' and Dealers')
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.

Mauls
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.

Mechanical Draft Plant
American Blower Co., Detroit, Mich.
American Stoker Co., 11 Broadway, New York.
Baldwin, William J., World Bldg., New York.
Buffalo Forge Co., Buffalo, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
Kidde, Walter, 140 Cedar St., New York.
New York Blower Co., Stewart Ave., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Metallic Window Frame and Sash
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Irwin Thos. W. Mfg. Co., N. S., Pittsburg, Pa.
Lupton's Sons Co., David, Allegheny Ave. & Witte St., Philadelphia, Pa.
Mullins Co., W. H., Salem, Ohio.

Metals (Reinforcing)
American System of Reinforcing, 189 La Salle St., Chicago, Ill.
Berger Mfg. Co., Canton, Ohio.
Clinton Wire Cloth Co., 1 Madison Ave., New York.
Concrete Steel Co., 29 Broadway, New York.
Consolidated Expanded Metal Cos., 225 Fifth Ave., N. Y.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hough C., Wm. B., Monadnock Blk., Chicago, Ill.
Lackawanna Steel Co., 2 Rector St., New York.

Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.
Truss Metal Lath Co., 147 Fourth Ave., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Warner Co., Chas., Wilmington, Del.

Metal Shingles and Tile

Berger Mfg. Co., Canton, Ohio.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Mullins Co., W. H., Salem, Ohio.

Meter Box Covers

Buffalo Meter Co., 290 Terrace, Buffalo, N. Y.
Builders' Iron Foundry Providence, R. I.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
McWane Pipe Works, Lynchburg, Va.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.

Meter Provers

Pittsburgh Meter Co., East Pittsburgh, Pa.

Meters (Water, Oil and Gas)

American District Steam Co., Lockport, New York.
Buffalo Meter Co., 290 Terrace, Buffalo, N. Y.
Builders' Iron Foundry, Providence, R. I.
International Steam Pump Co., 115 B'way, New York.
National Meter Co., 84-86 Chambers St., New York.
Neptune Meter Co., 90 West St., New York.
Pittsburg Meter Co., East Pittsburg, Pa.
Simplex Valve & Meter Co., 112 N. Broad St., Phila., Pa.
Standard Water Meter Co., 245 Robinson St., Brooklyn, N. Y.
Worthington, Henry R., 115 Broadway, New York.

Mills (Sugar)

Buffalo Forge Co., Buffalo, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.

Mining Machinery

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlas Dryer Co., Cleveland, Ohio.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bucyrus Co., So. Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Flory, S., Mfg. Co., Bangor, Pa.
Hardsocg Co., Martin, Allegheny, Pa.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 Broadway, New York.

Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kent Mill Co., 170 Broadway, New York.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Lambert Hoisting Engine Co., Newark, N. J.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Phœnix Iron Works Co., Meadville, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Ruggles-Coles Engineering Co., 39 Cortlandt St., N. Y.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Traylor Engineering Co., Allentown, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Mining Shafts

Carnegie Steel Co., Pittsburg, Pa.
Cresson Co., Geo., V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Foundation Co., 115 Broadway, New York.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.

Mixers (Asphalt)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Cummer & Son Co., F. D., Cleveland, Ohio.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Lake Erie Engineering Works, Buffalo, N. Y.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Tidewater Iron W'ks, 8th & Jefferson Sts., Hoboken, N.J.

Mixers (Cement), (See Cement Mixers)

Mixers (Mortar)

Allis-Chalmers Co., Milwaukee, Wis.
Besser Mfg. Co., Alpena, Mich.
Eureka Machine Co., Lansing, Mich.
Foote Concrete Machinery Co., 184 La Salle St., Chicago, Ill.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Municipal Engineering & Contracting Co., Railway Exchange, Chicago, Ill.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Waterloo Cement Machinery Corporation, Waterloo, Ia.

Motor Cars

Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Motors (Compressed Air)
Dake Engine Co., Grand Haven, Mich.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Northern Engineering Works, Detroit, Mich.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Vulcan Iron Works, Wilkes-Barre, Pa.

Motors (Electric)
Allis-Chalmers Co., Milwaukee, Wis.
Burke Electric Co., Erie, Pa.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
General Electric Co., Schenectady, N. Y.
Northern Engineering Works, Detroit, Mich.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Sturtevant, B. F., Co., Hyde Park, Mass.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Motors (Water and Steam)
Dake Engine Co., Grand Haven, Mich.
Standard Water Meter Co., 245 Robinson St., Brooklyn, N. Y.

Municipal Hand Cars (See Cars [Hand and Push])

Nails (Wire)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Page Woven Wire Fence Co., Adrian, Mich.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Netting (Wire)
Anchor Post Iron Works, 15 Church St., New York.
Clinton Wire Cloth Co., 1 Madison Ave., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Roebling Construction Co., Fuller Bldg., New York.

Nickel Steel
Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Huron Steel & Iron Co., Norwalk, Ohio.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.

Nuts and Nut Locks
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Fairbanks Co., Broome & Lafayette Sts., New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Oakum
American Mfg. Co., 65 Wall St., New York.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Oil Burners (Gem)
Petroleum Iron Works, Sharon, Pa.

Oil Filters
Burt Mfg. Co., Akron, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.

Oil (Linseed)
Sterling Varnish Co., Fulton Bldg., Pittsburg, Pa.

Oil Refining Plants
Graver, Wm., Tank Works, East Chicago, Ind.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Petroleum Iron Works, Sharon, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.

Oiling Systems
Burt Mfg. Co., Akron, Ohio.
Lunkenheimer Co., Cincinnati, Ohio.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati.

Packing
American Mfg. Co., 65 Wall St., New York.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Greene, Tweed & Co., 109 Duane St., New York.
Jenkins Bros., 71 John St., New York.
Johns-Manville Co., H. W., 100 William St., New York.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Packing (Leather)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Detroit Leather Specialty Co., Inc., 50 Beecher Ave., Detroit, Mich.
Dudgeon, Richard, 24 Columbia St., New York.
Watson-Stillman Co., 50 Church St., New York.

Packing (Metallic)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
Power Specialty Co., 111 Broadway, New York.

Packing (Water-Pipe)
American Mfg. Co., 65 Wall St., New York.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.

Paints & Metal Coatings
Carbolineum Wood Preserving Co., 349 West Broadway, New York.
Dixon Crucible Co., Joseph, Jersey City, N. J.
Elaterite Paint & Mfg. Co., Des Moines, Ia.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Glidden Varnish Co., Cleveland, Ohio.
Hammond-Boynton Paint & Chemical Co., Norwich, Conn.
Hydre Felt & Engineering Co., 120 Liberty St., N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
National Paint Wks., 100 William St., New York.
Rinald Bros., 1146 No. Hancock St., Philadelphia, Pa.
Sicilian Asphalt Paving Co., 41 Park Row, New York.
Sterling Varnish Co., Fulton Bldg., Pittsburg, Pa.
Teredo Proof Paint Co., 17 Battery Pl., New York.
Wadsworth, Howland & Co., 156 Fifth Ave., New York.
Warner Co., Chas., Wilmington, Del.

Paints (Asphalt)
American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Barber Asphalt Paving Co., Maurer, N. J.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Glidden Varnish Co., Cleveland, Ohio.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Sterling Varnish Co., Fulton Bldg., Pittsburg, Pa.
Warner Co., Chas., Wilmington, Del.

Paper (Drafting)
Iszard Warren Co., Inc., 1122 Vine St., Philadelphia, Pa.
Kolesch & Co., 138 Fulton St., New York.
Mitteneague Paper Co., Mitteneague, Mass.

Paving Joint Filter
American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
Barrett Mfg. Co., 17 Battery Pl., New York.
Knickerbocker Chemical Co., 24-26 Stone St., N. Y.
Standard Asphalt & Rubber Co., 205 La Salle St., Chicago, Ill.

Pavements (See also Asphalt Paving)
Barrett Mfg. Co., New York.
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Gulf Refining Co., Frick Bldg., Annex, Pittsburg, Pa.
Imperial Road Co., Times Bldg., New York.
McAvoy Vitrified Brick Co., 345 Arch St., Phila., Pa.
Rockport Granite Co., Rockport, Mass.
Sicilian Asphalt Paving Co., 41 Park Row, New York.
Standard Oil Co., New York.
U. S. Wood Preserving Co., 29 Broadway, New York.

Peat Collectors
Milne, W. A., & Sons, Hamilton, Ontario, Can.

Penstocks
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Graver Wm., Tank Works, East Chicago, Ind.
Morris Co., I. P., Philadelphia, Pa.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Petroleum Iron Works, Sharon, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Walsh's Holyoke Steam Boiler Works, Holyoke, Mass.

Perforated Metals
Allis-Chalmers Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Clinton Wire Cloth Co., 1 Madison Ave., New York.

Pile Driving Machinery
American Hoist & Derrick Co., St. Paul, Minn.
American Mfg. Co., 65 Wall St., New York.
Browning, Victor R., & Co., Cleveland, Ohio.
Bucyrus Co., So. Milwaukee, Wis.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Conklin, H. O., Equipment Co., Harvey, Ill.

Contractor's Plant Mfg. Co., Buffalo, N. Y.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Flory, S., Mfg. Co., Bangor. Pa.
Ingersoll-Rand Co., 11 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Lambert Hoisting Engine Co., Newark, N. J.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Union Iron Works, Hoboken, N. J.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Williamson Bros. Co., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Pile Protection

Lock Joint Pipe Co., 165 Broadway, New York.
Miller & Co., C. L., 110 E. 23d St., New York.
Teredo Proof Paint Co., 17 Battery Pl., New York.

Pile Shoes

Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Janney Steinmetz & Co., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.

Piles (Concrete)

Foundation Co., 115 Broadway, New York.
Hennebique Construction Co., 1170 Broadway, New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Pneumatic Caisson Co., National State Bank Bldg., Troy, N. Y.
Raymond Concrete Pile Co., 135 Adams St., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Wilkins, Grant, Atlanta, Ga.

Piles (Creosoted)

Barber Asphalt Paving Co., Land Title Bldg., Phila., Pa.
Barber Asphalt Paving Co., Maurer, N. J.
Carbolineum Wood Preserving Co., 349 W. B'way, N. Y.
Gulfport Creosoting Co., Gulfport, Miss.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Piles (Timber)

Foundation Co., 115 Broadway, New York.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Piling (Interlocking Steel)

Canton Bridge Co., Canton, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
McCoy Co., Henry J., 67 Dey St., New York.
Wemlinger Steel Piling Co., 11 Broadway, New York.

Piling (Timber Sheet)

Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.

Pipe and Boiler Coverings

American District Steam Co., Lockport, N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Michigan Pipe Co., Bay City, Mich.

Pipe-Bending Machines
Dudgeon, Richard, 24 Columbia St., New York.

Pipe Bends
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Massillon Iron & Steel Co., Massillon, Ohio.
Morris Co., I. P., Philadelphia, Pa.
National Pipe Bending Co., New Haven, Conn.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Pipe (Cast-Iron)
American Cast Iron Pipe Co., Birmingham, Ala.
Builders' Iron Foundry, Providence, R. I.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dimmick Pipe Co., Birmingham, Ala.
Donaldson Iron Co., Emaus, Lehigh Co., Pa.
Fox & Co., John, 253 Broadway, New York.
Galion Iron Works Co., Galion, Ohio.
Hitchings & Co., 1170 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Massillon Iron & Steel Co., Massillon, Ohio.
McWane Pipe Works, Lynchburg, Va.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
U. S. Cast Iron Pipe & Foundry Co., 71 B'way, N. Y.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Pipe (Concrete)
Besser Mfg. Co., Alpena, Mich.
Lock Joint Pipe Co., 165 Broadway, New York.
Ransome, Ernest L., 11 Broadway, New York.
Reinforced Concrete Pipe Co., Jackson, Mich.

Pipe Cutters
Fernyak & Stavenik Machine Co., Mansfield, Ohio.
Smith, A. P., Mfg. Co., Newark, N. J.
Water Works Equipment Co., 50 Church St., N. Y.

Pipe Dip
American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Barber Asphalt Paving Co., Land Title Bldg., Phila., Pa.
Barrett Mfg. Co., 17 Battery Pl., New York.
Miller & Co., C. L., 110 E. 23d St., New York.
Standard Asphalt & Rubber Co., 205 La Salle St., Chicago, Ill.

Pipe Fittings
American Cast Iron Pipe Co., Birmingham, Ala.
American District Steam Co., Lockport, N. Y.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Builders' Iron Foundry, Providence, R. I.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dimmick Pipe Co., Birmingham, Ala.
Donaldson Iron Co., Emaus, Lehigh Co., Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fox & Co., John, 253 Broadway, New York.
Lunkenheimer Co., Cincinnati, Ohio.
Massillon Iron & Steel Co., Massillon, Ohio.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.
U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, N. Y.

Pipe (Galvanized Iron)
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
New York Blower Co., Stewart Ave., Chicago, Ill.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Pipe—Joint Compounds
Dixon Crucible Co., Joseph, Jersey City, N. J.
Johns-Manville Co., H. W., 100 William St., New York.
Miller & Co., C. L., 110 E. 23d St., New York.

Pipe-Joints
American District Steam Co., Lockport, New York.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Goldschmidt Thermit Co., 90 West St., New York.
Leadite Co., Inc., 1232 Land Title Bldg., Philadelphia, Pa.
Power Specialty Co., 111 Broadway, New York.
United Lead Co., 111 Broadway, New York.

Pipe (Lead)
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
United Lead Co., 111 Broadway, New York.

Pipe-Line Supplies
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Goldschmidt, Thermit, Co., 90 West St., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
McCoy Co., Henry J., 67 Dey St., New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Star Expansion Bolt Co., 147 Cedar St., New York.
Union Iron Works, Hoboken, N. J.

Pipe (Lock-Bar)
East Jersey Pipe Co., 90 West St., New York.
Gillespie Co., T. A., Westinghouse Bldg., Pittsburg, Pa.
Reinforced Concrete Pipe Co., Jackson, Mich.

Pipe (Reinforced Concrete)
Lock Joint Pipe Co., 165 Broadway, New York.
Parmley, Walter C., Everett Bldg., Union Sq., N. Y.
Ransome Concrete Machinery Co., Dunellen, N. J.
Ransome, Ernest L., 11 Broadway, New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.

Pipe (Riveted Steel)
American Bridge Co. of N. Y., 30 Church St., N. Y.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Baltimore Bridge Co., Baltimore, Md.
Canton Bridge Co., Canton, Ohio.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Des Moines Bridge & Iron Co., Des Moines, Ia
Douglas, Geo. B., 29 Broadway, New York.
East Jersey Pipe Co., 90 West St., New York.
Gillespie Co., T. A., Westinghouse Bldg., Pittsburg, Pa.
Graver, Wm., Tank Works, East Chicago, Ind.

Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
McNeil & Bros. Co., James, Pittsburg, Pa.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago Ill.
Petroleum Iron Works, Sharon, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Walsh's Holyoke Steam Boiler Works, Holyoke, Mass.

Pipe (Steel)

American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
East Jersey Pipe Co., 90 West St., New York.
Gillespie Co., T. A., Westinghouse Bldg., Pittsburg, Pa.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Lake Erie Engineering Works, Buffalo, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Traylor Engineering Co., Allentown, Pa.
United State Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Pipe, Submerged

Wardwell, Frederick S., Stamford, Conn.

Pipe (Vitrified Clay and Sewer)

East Ohio Sewer Pipe Co., Irondale, Ohio.
Evens & Howard Fire Brick Co., St. Louis, Mo.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Robinson Clay Product Co., Flatiron Bldg., New York.
Warner Co., Chas., Wilmington, Del.

Pipe (Wood)

American District Steam Co., Lockport, New York.
Excelsior Wooden Pipe Co., Balboa Bldg., San Francisco, Cal.
Janney Steinmetz & Co., Philadelphia, Pa.
Michigan Pipe Co., Bay City, Mich.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pacific Coast Pipe Co., Seattle, Wash.
Portland Wood Pipe Co., Box 4038, Portland, Ore.
Washington Pipe & Foundry Co., Tacoma, Wash.
Wendnagel & Co., 22d & Jefferson Sts., Chicago, Ill.
Wyckoff, A., & Son Co., Elmira, N. Y.

Pipe (Wrought Iron)

American District Steam Co., Lockport, New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Douglas, Geo. B., 29 Broadway, New York.
East Jersey Pipe Co., 90 West St., New York.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.

Pipe (Wrought Iron and Cement)
American Pipe Mfg. Co., 112 N. Broad St., Phila., Pa.

Piping Contractors
American District Steam Co., Lockport, New York.
Scully Steel & Iron Co., Chicago, Ill.
Wardwell, Frederick S., Stamford, Conn.

Pitch
Barber Asphalt Paving Co., Philadelphia, Pa.
Barrett Mfg. Co., 17 Battery Pl., New York.

Plaster
Warner Co., Chas., Wilmington, Del.

Plates (Steel)
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Carnegie Steel Co., Pittsburg, Pa.
Climax Road Machine Co., Marathon, N. Y.
Decatur Bridge Co., Decatur, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Graver Wm., Tank Co., East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Huron Steel & Iron Co Norwalk Ohio
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kratzer & Co. W. N., 3230 Smallman St., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Virginia Bridge & Iron Co., Roanoke, Va.
Wemlinger Steel Piling Co., 11 Broadway, New York.
Whitehead & Kales Iron Works, Detroit, Mich.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Pliers (Wire-Cutting)
Scully Steel & Iron Co., Chicago, Ill.

Plumbers' Materials (Sanitary Specialties, Etc.)
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Glidden Varnish Co., Cleveland, Ohio.
Johns-Manville Co., H. W., 100 William St., New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Star Expansion Bolt Co., 147 Cedar St., New York.

Pneumatic Tools (See Compressed Air Tools

Poles and Posts (Iron, Steel, Trolley Posts, Etc.)
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Gulfport Creosoting Co., Gulfport, Miss.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.
Wyckoff Pipe & Creosoting Co., 50 Church St., N. Y.

Portland Cement
Alpha Portland Cement Co., Easton, Pa.
Atlas Portland Cement Co., 30 Broad St., New York.
Chicago Portland Cement Co., 108 La Salle St., Chicago, Ill.
Dexter Portland Cement Co., Philadelphia, Pa.

Douglas, Geo. B., 29 Broadway, New York.
Fredenburg & Lounsbury, 289 Fourth Ave., New York.
French, Samuel H., & Co., Philadelphia, Pa.
Hartranft Cement Co., Wm. G., Real Estate Trust Bldg., Philadelphia, Pa.
Lawrence Cement Co., 1 Broadway, New York.
Lehigh Portland Cement Co., Allentown, Pa.
Marquette Cement Mfg. Co., Marquette Bldg., Chicago, Ill.
Pennsylvania Cement Co, 26 Cortlandt St., New York.
Sandusky Portland Cement Co., Sandusky, Ohio.
Universal Portland Cement Co., Com'l Bank Bldg., Chicago, Ill.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Pots (Melting)

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Graver, Wm., Tank Works, East Chicago, Ind.
Lake Erie Engineering Works, Buffalo, N. Y.
Pittsburgh Mfg. Co., Pittsburgh, Pa.

Powder

Ætna Powder Co., 143 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Du Pont de Nemours, E. I., Powder Co., Wilmington.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Keystone Powder Mfg. Co., Emporium, Pa.
National Powder Co., 200 Fifth Ave., New York.
Sinnamahoning Powder Mfg. Co., Emporium, Pa.
Trojan Powder Co., 60 Wall St., New York.

Power Plant Piping

Kidde, Walter, 140 Cedar St., New York.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Portland Wood Pipe Co., Box 4038, Portland, Ore.

Power Transmission Machinery

Allis-Chalmers Co., Milwaukee, Wis.
American Mfg. Co., 65 Wall St., New York.
Chain Belt Co., Milwaukee, Wis.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Leffel & Co., Springfield, Ohio.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morse Chain Co., Ithaca, N. Y.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Smith Co., S. Morgan, York, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Presses (Hydraulic)

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dudgeon, Richard, 24 Columbia St., New York.
Hydraulic Press Mfg. Co., Mt. Gilead, Ohio.
Lake Erie Engineering Works, Buffalo, N. Y.
Moore, Sam'l L., & Sons, Elizabeth, N. J.
Morris Co., I. P., Philadelphia, Pa.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Presses (Screw)
International Con. Filter Press Co., 10 Weybosset St. Providence, R. I.
Fairbanks Co., Broome & Lafayette Sts., New York.

Producers (Gas), (See Gas Producers)

Pullers (Car)
American Mfg. Co., 65 Wall St., New York.
Burrell Mfg. Co., Bradley, Ill.
Hunt Co., C. W., West New Brighton, N. Y.

Pulleys
Allis-Chalmers Co., Milwaukee, Wis.
Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St. Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Minneapolis Steel & Machinery Co., Minneapolis, Minn
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Smith Co., S. Morgan, York, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Pulverizers
Allis-Chalmers Co., Milwaukee, Wis.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bradley Pulverizer Co., 92 State St., Boston, Mass.
Conklin, H. O., Equipment Co., Harvey, Ill.
Kent Mill Co., 170 Broadway, New York.
Power & Mining Machinery Co., Cudahy, Wis.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., New York
Raymond Bros. Impact Pulverizer Co., 145 Laflin St. Chicago, Ill.
Smidth & Co., F. L., 50 Church St., New York.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Universal Road Machinery Co., 120 Liberty St., N. Y
Williams Pat. Crusher & Pulverizer Co., Old Colony Bldg., Chicago, Ill.

Pumps (Operated by Air)
American Well Works, Aurora, Ill.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal
Du Bois Iron Works, Du Bois, Pa.
Epping-Carpenter Co., Pittsburg, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 Broadway, N. Y.
Jeanesville Iron Works Co., Hazleton, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Union Steam Pump Co., Battle Creek, Mich.
Wheeler, C. H., Mfg. C., 18th & Lehigh Ave., Phila., Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Steam and Power)
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.

Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Baldwin, William J., World Bldg., New York.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dayton Hydraulic Machinery Co., Dayton, Ohio.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Deane Steam Pump Co., 115 Broadway, New York.
De Laval Steam Turbine Co., Trenton, N. J.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Dudgeon, Richard, 24 Columbia St., New York.
Emerson Steam Pump Co., Alexandria, Va.
Epping-Carpenter Co., Pittsburg, Pa.
Erie Pump & Engine Co., Erie, Pa.
Foos Gas Engine Co., Sprinfield, Ohio.
Goulds Mfg. Co., Seneca Falls, N. Y.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
International Steam Pump Co., 115 Broadway, New York.
Jeanesville Iron Works Co., Hazelton, Pa.
Knowles Steam Pump W'ks, 115 Broadway, New York.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Machine Co., Lawrence, Mass.
Lawrence Pump & Engine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Lombard Iron Works, Augusta, Ga.
Marsh Co., 970 Old Colony, Bldg., Chicago, Ill.
Morris Machine Works, Baldwinsville, N. Y.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Union Steam Pump Co., Battle Creek Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Walker Mfg. Co., Fenton, Mich.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Centrifugal)

Abenaque Machine Works, Westminster Sta., Vt.
Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dayton Hydraulic Machinery Co., Dayton, Ohio.
De Laval Steam Turbine Co., Trenton, N. J.
Deming Co., Salem, Ohio.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Erie Pump & Engine Co., Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
International Steam Pump Co., 115 Broadway, N. Y.

Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jeanesville Iron Works Co., Hazleton, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Machine Co., Lawrence, Mass.
Lawrence Pump & Engine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Morris Machine Works, Baldwinsville, N. Y.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Prescott Fred. M. Steam Pump Co., Milwaukee, Wis.
Rider-Ericsson Engineering Co., 35 Warren St., N. Y.
Scully Steel & Iron Co., Chicago, Ill.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Deep Well)

Abenaque Machine Works, Westminster Sta., Vt.
American Injector Co., Detroit, Mich.
American Well Works, Aurora, Ill.
Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dean Bros., Steam Pump Co., Indianapolis, Ind.
Deane Steam Pump Co., 115 Broadway, New York.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Epping-Carpenter Co., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Flint & Walling Mfg. Co., Kendallville, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, New York.
Jeanesville Iron Works Co., Hazleton, Pa.
Keystone Driller Co., Beaver Falls, Pa.
Knowles Steam Pump Works, 115 Broadway, New York.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lea Equipment Co., 90 West St., New York.
Rider-Ericsson Eng. Co., 35 Warren St., New York.
Roth Mfg. C., 165 E. Morris St., Indianapolis, Ind.
Union Steam Pump Co., Battle Creek, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Diaphragm)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.

Fairbanks Co., Broome & Lafayette Sts., New York.
Goulds Mfg. Co., Seneca Falls, N. Y.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Water Works Equipment Co., 50 Church St., New York.

Pumps (Dredging)

Alberger Pump Co., 95 Liberty St., New York.
American Well Works, Aurora, Ill.
Bucyrus Co., So. Milwaukee, Wis.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Deming Co., Salem, Ohio.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Erie Pump & Engine Co., Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
International Steam Pump Co., 115 Broadway, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jeanesville Iron Works Co., Hazleton, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Lawrence Machine Co., Lawrence, Mass.
Lawrence Pump & Engine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Morris Machine Works, Baldwinsville, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Mine)

Abenaque Machine Works, Westminster Sta., Vt.
Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dayton Hydraulic Machinery Co., Dayton, Ohio.
Dean Bros., Steam Pump Co., Indianapolis, Ind.
Deane Steam Pump Co., 115 Broadway, New York.
De Laval Steam Turbine Co., Trenton, N. J.
Deming Co., Salem, Ohio.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Du Bois Iron Works, Du Bois, Pa.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Emerson Steam Pump Co., Alexandria, Va.
Epping-Carpenter Co., Pittsburg, Pa.
Erie Pump & Engine Co., Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Jeanesville Iron Works Co., Hazleton, Pa.
Knowles Steam Pump W'ks, 115 Broadway, New York.

Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Machine Co., Lawrence, Mass.
Lawrence Pump & Engine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Morris Machine Works, Baldwinsville, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Union Steam Pump Co., Battle Creek, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Rotary)

Abenaque Machine Works, Westminster Sta., Vt.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Erie Pump & Engine Co., Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Pump & Engine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Morris Machine Works, Baldwinsville, N. Y.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Smith Co., S. Morgan, York, Pa.
Southwark Foundry & Machinery Co., Philadelphia, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Sand)

Allis-Chalmers Co., Milwaukee, Wis.
American Wells Works, Aurora, Ill.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Steam Pump Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Deming Co., Salem, Ohio.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Erie Pump & Engine Co., Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
International Steam Pump Co., 115 Broadway, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Pump & Engine Co., Lawrence, Mass.
McCoy Co., Henry J., 67 Dey St., New York.
Morris Machine Works, Baldwinsville, N. Y.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Sweeney & Gray, 81-5 Sixth St., Long Island City, N. Y.
Traylor Engineering Co., Allentown, Pa.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Vacuum)

Abenaque Machine Works, Westminster Sta., Vt.
Alberger Pump Co., 95 Liberty St., New York.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Buffalo Steam Pump Co., Buffalo, N. Y.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Dean Bros., Steam Pump Co., Indianapolis, Ind.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Emerson Steam Pump Co., Alexandria, Va.
Epping-Carpenter Co., Pittsburg, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, New York.
Jeanesville Iron Works Co., Hazleton, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Pulsometer Steam Pump Co., 17 Battery Pl., New York.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Union Steam Pump Co., Battle Creek, Mich.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Waterworks)

Abenaque Machine Works, Westminster Sta., Vt.
Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Buffalo Steam Pump Co., Buffalo, N. Y.
Deane Steam Pump Co., 115 Broadway, New York.
De Laval Steam Turbine Co., Trenton, N. J.
Deming Co., Salem, Ohio.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Du Bois Iron Works, Du Bois, Pa.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Epping-Carpenter Co., Pittsburg, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, N. Y.
Jeanesville Iron Works Co., Hazleton, Pa.
Knowles Steam Pump W'ks, 115 Broadway, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Lawrence Machine Co., Lawrence, Mass.
Lea Equipment Co., 90 West St., New York.
Morris Machine Works, Baldwinsville, N. Y.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Roth Mfg. Co., 165 E. Morris St., Indianapolis, Ind.
Southwark Foundry & Machine Co., Philadelphia, Pa.
Thompson, J., & Sons, Mfg. Co., Beloit, Wis.
Union Steam Pump Co., Battle Creek, Mich.
Walker Mfg. Co., Fenton, Mich.
Wheeler, C. H., Mfg. Co., 18th & Lehigh Ave., Philadelphia, Pa.
Wisconsin Engine Co., Corliss, Wis.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Worthington, Henry R., 115 Broadway, New York.

Pumps (Windmill)

Abenaque Machine Works, Westminster Sta., Vt.
Deming Co., Salem, Ohio.
Douglas, W. & B., Middletown, Conn.
Flint & Walling Mfg. Co., Kendallville, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.

Punches (Beam and Angle)

Buffalo Forge Co., Buffalo, N. Y.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Dudgeon, Richard, 24 Columbia St., New York.
Fairbanks Co., Broome & Lafayette Sts., New York.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Push Cars (See Cars [Hand and Push])

Quarry Bars

Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Ingersoll-Rand Co., 11 Broadway, New York.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.

Quarry Machinery

Allis Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St. Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clyde Iron Works, Duluth, Minn.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Dake Engine Co., Grand Haven, Mich.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Flory, S., Mfg. Co., Bangor, Pa.
Hardsocg Co., Martin, Allegheny, Pa.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Ingersoll Rand Co., 11 Broadway, New York.
Koppel Co., Arthur, Pittsburg, Pa.
Lambert Hoisting Engine Co., Newark, N. J.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Mead-Morrison Mfg. Co., Cambridge, Mass.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Sullivan Machinery Co., Railway Exchange, Chicago, Ill.
Union Iron Works, Hoboken, N. J.
Universal Road Machinery Co., 120 Liberty St., N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Williamson Bros. Co., Philadelphia, Pa.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Radiators

American District Steam Co., Lockport, New York.
American Radiator Co., 104 W. 42d St., New York.
Baldwin, William J., World Bldg., New York.

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Gurney Heater Mfg. Co., 200 Franklin St., Boston, Mass.

Rail Joints, Fastenings and Specialties

Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Goldschmidt Thermit Co., 90 West St., New York.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Pennsylvania Steel Co., B. & C., Dept., Steelton, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Railings, Guards, Fences, Etc.

Anchor Post Iron Works, 15 Church St, New York.
Griffiths Iron W'ks, 23d & Papin Sts., St. Louis, Mo.
Star Expansion Bolt Co., 147 Cedar St., New York.
Stewart Iron Works, Co., Cincinnati, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.

Railroads

American Engineering & Construction Co., Drexel Bldg., Philadelphia, Pa.
Illinois Central Railroad, 1 Park Row, Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Long Island Railroad, 263 Fifth Avenue, New York.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Pennsylvania Railroad, Philadelphia, Pa.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Railroad Track Supplies

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Carnegie Steel Co., Pittsburg, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Goldschmidt Thermit Co., 90 West St., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Star Expansion Bolt Co., 147 Cedar St., New York.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rails and Track

Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Pennsylvania Steel Co., B. & C. Dept., Steeltown, Pa.
Prosser, Thos. & Son ("Krupp"), 15 Gold St., N. Y.
Southern Iron & Equipment Co., Atlanta, Ga.

Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rails, Second-Hand

Conklin, H. O., Equipment Co., Harvey, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Southern Iron & Equipment Co., Atlanta, Ga.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Railways, Industrial and Narrow-Gauge

American Engineering & Construction Co., Drexel Bldg., Philadelphia, Pa.
Conklin, H. O., Equipment Co., Harvey, Ill.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rate Controllers for Filters

Norwood Engineering Co., Florence, Mass.
Simplex Valve & Meter Co., 112 No. Broad St., Philadelphia, Pa.

Reamers

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Scully Steel & Iron Co., Chicago, Ill.

Reamers (Pneumatic)

Fairbanks Co., Broome & Lafayette Sts., New York.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Refrigerating Plants

Cresson Co., Geo. V., Allegheny Ave., W. of 17th St., Philadelphia, Pa.
Kidde, Walter, 140 Cedar St., New York.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Traylor Engineering Co., Allentown, Pa.

Regulators (Steam)

Allis-Chalmers Co., Milwaukee, Wis.
American District Steam Co., Lockport, New York.

Regulators (Water-Pressure)

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.

Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Pittsburgh Meter Co., East Pittsburgh, Pa.
Simplex Valve & Meter Co., 112 N. Broad St., Phila., Pa.

Reinforced Concrete Construction (See Concrete, Reinforced)

Reinforcement Steel for Concrete Structures

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
American System of Reinforcing, 189 La Salle St., Chicago, Ill.
Belmont Iron Works, 22d St. & Wash. Ave., Phila., Pa.
Berger Mfg. Co., Canton, Ohio.
Buffalo Steel Co., Tonawanda, N. Y.
Calumet Steel Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Clinton Wire Cloth Co., 1 Madison Ave., New York.
Concrete Steel Co., 29 Broadway, New York.
Concrete Steel Engineering Co., Park Row Bldg., N. Y.
Consolidated Expanded Metal Co's, 225 Fifth Ave., N. Y.
Corrugated Bar Co., St. Louis, Mo.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hermann, Leibu, 11 Broadway, New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
McCoy Co., Henry J., 67 Dey St., New York.
Mississippi Valley Construction Co., Fullerton Bldg., St. Louis, Mo.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Northwestern Expanded Metal Co., Old Colony Bldg., Chicago, Ill.
Page Woven Wire Fence Co., Adrian, Mich.
Portland Iron & Steel Co., 1009 Board of Trade Bldg., Boston, Mass.
Riverside Bridge Co., Martin's Ferry, Ohio.
Roebling Construction Co., Fuller Bldg., New York.
Rogers-Shear Co., Warren, Pa.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Turner Construction Co., 11 Broadway, New York.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Warner Co., Chas., Wilmington, Del.

Riveting Hammers

Channon Co., H., Market & Randolph St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
Scully Steel & Iron Co., Chicago, Ill.

Riveting Machines

Allen, John F., 370 Gerard Ave., New York.
Buffalo Forge Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Scully Steel & Iron Co., Chicago, Ill.

Rivets

Champion Rivet Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Road Machinery

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Barron, Jas. S., 133 Franklin St., New York.
Buffalo Pitts Co., Buffalo, N. Y.
Buffalo Steam Roller Co., Buffalo, N. Y.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Decatur Bridge Co., Decatur, Ill.
Galion Iron Works Co., Galion, Ohio.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Kelley-Springfield Road Roller Co., Springfield, Ohio.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Thew Automatic Shovel Co., Lorain, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Universal Road Machinery Co., 120 Liberty St., N. Y.

Road Oils

Barber Asphalt Paving Co., Philadelphia, Pa.
Barrett Mfg. Co., New York.
Gulf Refining Co., Pittsburg, Pa.
Indian Refining Co., First National Bank Bldg., Cincinnati, Ohio.
Standard Oil Co., 26 Broadway, New York.

Road Rollers

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Barber Asphalt Paving Co., Maurer, N. J.
Buffalo Pitts Co., Buffalo, N. Y.
Buffalo Steam Roller Co., Buffalo, N. Y.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Huber Mfg. Co., Marion, Ohio.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Kelley Springfield Road Roller Co., Springfield, Ohio.
Longenecker & Co., Chas., 150 Nassau St., New York.
Monarch Road Roller Co., Groton, Tompkins Co., N. Y.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Road Rollers (Horse)

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Galion Iron Works Co., Galion, Ohio.

Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.

Rolling Mill Machinery

American Mfg. Co., 65 Wall St., New York.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Wisconsin Engine Co., Corliss, Wis.

Roofing

Asbestos Protected Metal Co., Canton, Mass.
Barrett Mfg. Co., 17 Battery Pl., New York.
Buckingham Slate Co., Richmond, Va.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
Miller & Co., C. L., 110 E. 23d St., New York.
Mullins Co., W. H., Salem, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Roofing (Asphalt)

American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Barber Asphalt Paving Co., Maurer, N. J.
Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Knickerbocker Chemical Co., 24 Stone St., New York.
Standard Asphalt & Rubber Co., 205 La Salle St., Chicago, Ill.

Roofs (Steel Work for), (See Bridges, Roofs, Etc.)

Rope (Manila)

Allis-Chalmers Co., Milwaukee, Wis.
American Mfg. Co., 65 Wall St., New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rope (Transmission Power)

Allis-Chalmers Co., Milwaukee, Wis.
American Mfg. Co., 65 Wall St., New York.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Broderick & Bascom Rope Co., 805 No. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.

Fairbanks Co., Broome & Lafayette Sts., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rope (Wire)
American Hoist & Derrick Co., St. Paul, Minn.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Roebling's Sons Co., John A., Trenton, N. J.
Scully Steel & Iron Co., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Rubber Boots
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
Rubberhide Co., 212 Essex St., Boston, Mass.

Rules and Tapes
Fairbanks Co., Broome & Lafayette Sts., New York.
Iszard-Warren Co., Inc., 1122 Vine St., Philadelphia, Pa.
Kolesch & Co., 138 Fulton St., New York.
Lufkin Rule Co., Saginaw, Mich.
Wiebusch & Hilger, Ltd., 106 Lafayette St., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Sand
New York Continental Jewell Filtration Co., Mills Bldg., New York.
St. Louis Portland Cement Co., St. Louis, Mo.
Warner Co., Chas., Wilmington, Del.

Sand-Blast Machines
Abenaque Machine Works, Westminster Sta., Vt.
Ingersoll-Rand Co., 11 Broadway, New York.

Sash Operating Apparatus
Cassidy, Isaac, Summer Ave. & Erie R. R., Newark, N.J.
Hitchings & Co., 1170 Broadway, New York.
Lord & Burnham Co., Irvington-on-Hudson, New York.
Lupton's Sons Co., David, Allegheny Ave. & Witte St., Philadelphia, Pa.

Saw-Mill Machinery
Abenaque Machine Works, Westminster Sta., Vt.
Allis-Chalmers Co., Milwaukee, Wis.
Chain Belt Co., Milwaukee, Wis.

Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.

Scale Boxes

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Cyclopean Iron Works, Nutley, N. J.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Scales

Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Hunt Co., C. W., West New Brighton, N. Y.
Kolesch & Co., 138 Fulton St., New York.
Richardson Scale Co., 2-3 Park Row, New York.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Scarifiers

Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Buffalo Steam Roller Co., Buffalo, N. Y.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Longenecker & Co., Chas., 150 Nassau St., New York.
Universal Road Machinery Co., 120 Liberty St., N. Y.

Schools and Colleges

American School of Correspondence, Chicago, Ill.
Clarkson School of Technology, Potsdam, N. Y.
International Correspondence School, Box 923, W. Scranton, Pa.
Lafayette College, Easton, Pa.
New York University, University Heights, New York City.
Ohio Northern University, Ada, Ohio.
Pennsylvania Military College, Chester, Pa.
Rensselaer Polytechnic Institute, Troy, N. Y.
Rose Polytechnic Institute, Terre Haute, Ind.
School of Structural Drafting, P. O. Box, 2122, Boston.
Sheffield Scientific School, New Haven, Conn.
State University of Iowa, Iowa City, Ia.
Stevens School, Hoboken, N. J.
Tufts College, Tufts College, P. O., Mass.
University of Illinois, Urbana, Ill.
University of Pennsylvania, Philadelphia, Pa.
University of Pittsburg, Pittsburg, Pa.
University of Vermont, Burlington, Vt.
Washington College of Engineering, Washington, D. C.

Scientific Books (See Books, Engineering and Technical)

Scrapers, Road

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Conklin H. O., Equipment Co., Harvey, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Union Iron Works, Hoboken, N. J.

United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Screens (Sand, Coal, Gravel and Water)

Allis-Chalmers Co., Milwaukee, Wis.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Climax Road Machine Co., Marathon, N. Y.
Coldwell-Wilcox Co., Newburgh, N. Y.
Conklin, H. O., Euipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Kent Mill Co., 170 Broadway, New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.,
Union Iron Works, Hoboken, N. J.

Second-Hand Machinery and Supplies

Atlantic Equipment Co., 30 Church St., New York.
Architects' & Engineers' Supply Co., 1010 Grand Ave., Kansas City, Mo.
Chicago House Wrecking Co., 35th & Iron Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Continental Car & Equipment Co., 17 Battery Pl., N. Y.
Dallett & Co., 611 Harrison Bldg., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Heyworth, James O., Harvester Bldg., Chicago, Ill.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Southern Iron & Equipment Co., Atlanta, Ga.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Separators (Cement, Plaster, Etc.)

Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Kent Mill Co., 170 Broadway, New York.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.

Separators (Steam and Oil)

American Blower Co., Detroit, Mich.
American District Steam Co., Lockport, New York.
American Radiator Co., 104 W. 42d St., New York.
Baldwin, William J., World Bldg., New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.

Service Boxes

American District Steam Co., Lockport, New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.

Douglas, W. & B., Middletown, Conn.
Fox & Co., John, 253 Broadway, New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Water Works Equipment Co., 50 Church St., New York.

Settees (Iron)
Stewart Iron Works Co., Cincinnati, Ohio.

Sewage Disposal
Albright & Mebus, Land Title Bldg., Philadelphia, Pa.
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlas Dryer Co., Cleveland, Ohio.
Cameron Septic Tank Co., Monadnock Blk., Chicago, Ill.
City Wastes Disposal Co., 156 Fifth Ave., New York.
Coffin Valve Co., Neponset, Boston, Mass.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Hering & Fuller, 170 Broadway, New York.
International Con. Filter Press Co., 10 Weybosset St., Providence, R. I.
International Steam Pump Co., 115 Broadway, N. Y.
Lewis & Kitchen, 433 Wabash Ave., Chicago, Ill.
Pacific Flush Tank Co., 184 La Salle St., Chicago, Ill.
Phillips, Richard H., Security Bldg., St. Louis, Mo.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Potts, Clyde, 17 Battery Pl., New York.

Sewer Braces
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Bottomley Machine Co., Alliance, Ohio.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Kalamazoo Foundry & Machine Co., Kalamazoo, Mich.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.

Sewer Buckets
Brown Hoisting Machinery Co., Cleveland, Ohio.
Doud, A. N., 5802 Clinton Ave., Cleveland, Ohio.
McCoy Co., Henry J., 67 Dey St., New York.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.

Sewer Flushers (Automatic)
Coffin Valve Co., Neponset, Boston, Mass.
Pacific Flush Tank Co., 184 La Salle St., Chicago, Ill.

Sewer Pipe
Besser Mfg. Co., Alpena, Mich.
Climax Road Machine Co., Marathon, N. Y.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
East Ohio Sewer Pipe Co., Irondale, Ohio.
Evens & Howard Fire Brick Co., St. Louis, Mo.
Excelsior Wooden Pipe Co., Balboa Bldg., San Francisco, Cal.
Fox & Co., John, 253 Broadway, New York.
Lock Joint Pipe Co., 165 Broadway, New York.
Massillon Iron & Steel Co., Massillon, Ohio.
National Fire Proofing Co., 115 Adams St., Chicago, Ill.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Parmley, Walter C., Everett Bldg., Union Sq., N. Y.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Reinforced Concrete Pipe Co., Jackson, Mich.
Robinson Clay Product Co., Flatiron Bldg., New York.
Warner Co., Chas., Wilmington, Del.

Shackles

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.

Shafting

Allis-Chalmers Co., Milwaukee, Wis.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York..
Jones & Laughlin Steel Co., Pittsburg, Pa.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Power & Mining Machinery Co., Cudahy, Wis.
Scully Steel & Iron Co., Chicago, Ill.
Union Iron Works, Hoboken, N. J.
Vulcan Iron Works, Wilkesbarre, Pa.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Shears, Angle and Beam

Buffalo Forge Co., Buffalo, N. Y.
Cleveland Crane & Engineering Co., Wickliffe, Ohio.
Fairbanks Co., Broome & Lafayette Sts., New York.
Scully Steel & Iron Co., Chicago, Ill.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Sheaves for Wire Rope (Hoisting)

Allis-Chalmers Co., Milwaukee, Wis.
American Hoist & Derrick Co., St. Paul, Minn.
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Byers, Jno. F., Machine Co., Ravenna, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Flory, S., Mfg. Co., Bangor, Pa.
Haiss, Geo., Mfg. Co., 138th St. & Rider Ave., N. Y.
Hunt Co., C. W., West New Brighton, N. Y.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Roebling's Sons Co., John A., Trenton, N. J.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
Traylor Engineering Co., Allentown, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Hardsocg Co., Martin, Allegheny, Pa.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Shovels (Steam)
American Locomotive Co., 30 Church St., New York.
Atlantic Equipment Co., 30 Church St., New York.
Avery Company, Peoria, Ill.
Browning Mfg. Co., Cleveland, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dallett & Co., 611 Harrison Bldg., Philadelphia, Pa.
Hobbs-Ives Equipment & Machinery Co., Seaboard Bank, Norfolk, Va.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Marion Steam Shovel Co., Marion, Ohio.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Souther, John, & Co., Box 3118, Boston, Mass.
Thew Automatic Shovel Co., Lorain, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Shutters (Rolling)
Wilson Mfg. Co., Jas. G., 3 West 29th St., New York.

Sidewalks
Blome Co., R. S., 79 Dearborn St., Chicago, Ill.
Overhead & Underground Construction Co., 2 Rector St., New York.

Skips
Allis-Chalmers Co., Milwaukee, Wis.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Bergen Point Iron Works, 149 Broadway, New York.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Hunt Co., C. W., West New Brighton, N. Y.
Koppel Co., Arthur, Pittsburg, Pa.
Lambert Hoisting Engine Co., Newark, N. J.
Morris Co., I. P., Philadelphia, Pa.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Power & Mining Machinery Co., Cudahy, Wis.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Skylights
Aberthaw Construction Co., 8 Beacon St., Boston, Mass.
American Luxfer Prism Co., 42 Madison St., Chicago, Ill.
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Berger Mfg. Co., Canton, Ohio.
Brooks & Co., T. H., Cleveland, Ohio.
Burt Mfg. Co., Akron, Ohio.
Drouvé Co., G., Bridgeport, Conn.
Griffiths Iron W'k's Co., 23d & Papin Sts., St. Louis, Mo.

Sheet Metal Work

American Blower Co., Detroit, Mich.
Berger Mfg. Co., Canton, Ohio.
Cole Mfg. Co., R. D., Newnan, Ga.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Lupton's Sons Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Union Iron Works, Hoboken, N. J.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.

Sheets (Galvanized)

Berger Mfg. Co., Canton, Ohio.
Douglas, Geo. B., 29 Broadway, New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Irwin, Thos. W., Mfg. Co., N. S. Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.

Sheets (Iron and Steel)

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Berger Mfg. Co., Canton, Ohio.
Douglas, Geo. B., 29 Broadway, New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Janney, Steinmetz & Co., Philadelphia, Pa.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Whitehead & Kales Iron Works, Detroit, Mich.

Sheets (Roofing)

Berger Mfg. Co., Canton, Ohio.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Garry Iron & Steel Co., Coe & Lake Sts., Cleveland.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Johns-Manville Co., H. W., 100 William St., New York.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Shoring and Underpinning

Foundation Co., 115 Broadway, New York.
O'Rourke Engineering Construction Co., 345 Fifth Ave., New York.
Pneumatic Caisson Co., Nat'l State Bank Bldg., Troy, N. Y.
Wilkins, Grant, Atlanta, Ga.

Shovels and Picks (Hand)

Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.

Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
Lupton's Sons Co., David, Allegheny Ave., & Witte St., Philadelphia, Pa.
Mullins Co., W. H., Salem, Ohio.
Rendle, Arthur E., 18 W. 34th St., New York.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Star Expansion Bolt Co., 147 Cedar St., New York.
Van Noorden Co., E., 944 Massachusetts Ave., Boston.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.

Slag

Warner Co., Chas., Wilmington, Del.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Sluice Gates

Allis-Chalmers Co., Milwaukee, Wis.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Coffin Valve Co., Neponset, Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
Egleston, T. G., Ideal Bldg., Denver, Col.
Fox & Co., John, 253 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.

Sockets

Allis-Chalmers Co., Milwaukee, Wis.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Fairbanks Co., Broome & Lafayette Sts., New York.
Janney, Steinmetz & Co., Philadelphia, Pa.

Speaking Tubes

Ostrander & Co., W. R., 22 Dey St., New York.

Spikes (Railroad)

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Koppel Co., Arthur, Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Springs (Steel)

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Koppel Co., Arthur, Pittsburg, Pa.
Scully Steel & Iron Co., Chicago, Ill.

Sprinkling Carts (See Street Sprinklers)

Stacks (See Chimneys)

Stairs (Spiral)

Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.

Standpipes, Tanks, Towers

Abenaque Machine Works, Westminster Sta., Vt.
Aberthaw Construction Co., 8 Beacon St., Boston, Mass.

Aermotor Co., 1215 12th St., Chicago.
American Bridge Co. of N. Y., 30 Church St., N. Y.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Chicago Bridge & Iron Works, 105th and Throop Sts., Chicago, Ill.
Clinton Bridge & Iron Works, Clinton, Ia.
Cole Mfg. Co., R. D., Newnan, Ga.
Decatur Bridge Co., Decatur, Ill.
Des Moines Bridge & Iron Co., Des Moines, Ia.
East Jersey Pipe Co., 90 West St., New York.
Flint & Walling Mfg. Co., Kendallville, Ind.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hennebique Construction Co., 1170 Broadway, N. Y.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
McNeil & Bros. Co., James, Pittsburg, Pa.
Memphis Bridge Co., Memphis, Tenn.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris Co., I. P., Philadelphia, Pa.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Petroleum Iron Works, Sharon, Pa.
Phillips & Worthington, 90 West St., New York.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Struthers-Wells Co., Warren, Pa.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.
Tippett & Wood, Phillipsburg, N. J.
Traylor Engineering Co., Allentown, Pa.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Walsh's Holyoke Steam Boiler Works, Holyoke, Mass.
Warren Construction Co., Warren, Ohio.
Wendnagel & Co., 22d & Jefferson Sts., Chicago, Ill.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Steam Specialties

American Blower Co., Detroit, Mich.
American District Steam Co., Lockport, New York.
American Injector Co., Detroit, Mich.
American Stoker Co., 11 Broadway, New York.
Baldwin, William J., World Bldg., New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Johns-Manville Co., H. W., 100 William St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Moran Flexible Steam Joint Co., Louisville, Ky.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati

Power Specialty Co., 111 Broadway, New York.
Walworth Mfg. Co., Boston, Mass.
Zelnicker Supply Co., Walter A., St.. Louis, Mo.

Steamboat Ratchets

Patterson Co., W. W., 54 Water St., Pittsburg, Pa.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.

Steel Plate Construction

American Bridge Co. of N. Y., 30 Church St., N. Y.
Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Burger Iron Co., Akron, Ohio.
Canton Bridge Co., Canton, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Decatur Bridge Co., Decatur, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Graver, Wm., Tank Works, East Chicago, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Memphis Bridge Co., Memphis, Tenn.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris Co., I. P., Philadelphia, Pa.
Petroleum Iron Works, Sharon, Pa.
Phœnix Iron Works Co., Meadville, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Traylor Engineering Co., Allentown, Pa.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Walsh's Holyoke Steam Boiler Works, Holyoke, Mass.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Steel (Reinforcing, (See Reinforcement Steel for Concrete Structures)

Steel Ribs and Lagging

Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Carnegie Steel Co., Pittsburg, Pa.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.

Steel Substructures for Tanks

American Bridge Co. of N. Y., 30 Church St., New York.
Baltimore Bridge Co, Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Burger Iron Co., Akron, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Decatur Bridge Co., Decatur, Ill.

Des Moines Bridge & Iron Co., Des Moines, Ia.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago.
King Bridge Co., Cleveland, Ohio.
Lake Erie Engineering Works, Buffalo, N. Y.
Memphis Bridge Co., Memphis, Tenn.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.
U. S. Wind Engine & Pump Co., 23 Water St., Batavia, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.

Steel (Tape Line)
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Lufkin Rule Co., Saginaw, Mich.

Stokers (Mechanical)
American Blower Co., Detroit, Mich.
American Ship Windlass Co., Providence, R. I.
American Stoker Co., 11 Broadway, New York.
Babcock & Wilcox Co., 85 Liberty St., New York.
Green Engineering Co., 115 Adams St., Chicago, Ill.
Murphy Iron Works, Detroit, Mich.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.
Westinghouse Machine Co., Pittsburg, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Stone (Broken and Quarried)
Buckingham Slate Co., Richmond, Va.
Eureka Tray, Rock & Quarry Co., Astoria, N. Y.
National Lime & Stone Co., Carey, Ohio.
Rockport Granite Co., Rockport, Mass.
Warner Co., Chas., Wilmington, Del.
Woodward Co., A. H., Newark, N. J.

Stone Crusher Parts and Repairs
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Coldwell Wilcox Co., Newburgh, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.
Universal Road Machinery Co., 120 Liberty St., N. Y.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Stone Dressing Machines
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.

Straightening Machines (Angle, Beam and Channel), (See Bending, Straightening and Punching Machines)

Strainers (Pump)

American Injector Co., Detroit, Mich.
American Well Works, Aurora, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Douglas, W. & B., Middletown, Conn.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Emerson Steam Pump Co., Alexandria, Va.
Goulds Mfg. Co., Seneca Falls, N. Y.
Lawrence Machine Co., Lawrence, Mass.

Strainers (Well)

American Injector Co., Detroit, Mich.
American Well Works, Aurora, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Douglas, W. & B., Middletown, Conn.
Goulds Mfg. Co., Seneca Falls, N. Y.
Phillips & Worthington, 90 West St., New York.
Sweeney & Gray, 81 Sixth St., Long Island City, N. Y.

Street - Cleaning Implements, Machinery and Snow Plows

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Barron, Jas. S., 133 Franklin St., New York.
Climax Road Machine Co., Marathon, N. Y.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.

Street Sprinklers

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Graver, Wm., Tank Works, East Chicago, Ind.
Longenecker & Co., Chas., 150 Nassau St., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.

Structural and Ornamental Iron Works (See Ironwork, Architectural and Ornamental)

Structural Material

American Bridge Co. of N. Y., 30 Church St., N. Y.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Burger Iron Co., Akron, Ohio.
Canton Bridge Co., Canton, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Clinton Bridge & Iron Works, Clinton, Ia.
Decatur Bridge Co., Decatur, Ill.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks. Co., 23d & Papin Sts., St. Louis, Mo.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago, Ill.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Memphis Bridge Co., Memphis, Penn.
Northern Engineering Works, Detroit, Mich.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.

Pittsburgh Mfg. Co., Pittsburgh, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Snare & Triest Co., 143 Liberty St., New York.
Star Expansion Bolt Co., 147 Cedar St., New York.
Steel Protected Concrete Co., Real Estate Trust Bldg., Philadelphia, Pa.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wemlinger Steel Piling Co., 11 Broadway, New York.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Structural Steel

American Bridge Co. of N. Y., 30 Church St., N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio.
Belmont Iron Works, 22d St. & Washington Ave., Philadelphia, Pa.
Berlin Construction Co., Berlin, Conn.
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Buffalo Steel Co., Tonawanda, N. Y.
Burger Iron Co., Akron, Ohio.
Calumet Steel Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Canton Bridge Co., Canton, Ohio.
Carnegie Steel Co., Pittsburg, Pa.
Champion Bridge Co., Wilmington, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Clinton Bridge & Iron Works, Clinton, Ia.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
Decatur Bridge Co., Decatur, Ill.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Hudson Structural Steel Co., 136th St. & Southern Blvd., New York.
Inland Steel Co., First Nat'l Bank Bldg., Chicago, Ill.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Jones & Laughlin Steel Co., Pittsburg, Pa.
Kenwood Bridge Co., First Nat'l Bank Bldg., Chicago, Ill.
King Bridge Co., Cleveland, Ohio.
Koppel Co., Arthur, Pittsburg, Pa.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Lackawanna Steel Co., 2 Rector St., New York.
Lindsay, W. W., & Co., Harrison Bldg., Philadelphia, Pa.
Memphis Bridge Co., Memphis, Tenn.
Milwaukee Bridge Co., Midwaukee, Wis.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Noelke-Richards Iron Works, Indianapolis, Ind.
Penn Bridge Co., Beaver Falls, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Phœnix Bridge Co., 410 Walnut St., Philadelphia, Pa.
Riter-Conley Mfg. Co., Pittsburg, Pa.
Riverside Bridge Co., Martin's Ferry, Ohio.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Schreiber & Sons Co., L., Cincinnati, Ohio.
Scully Steel & Iron Co., Chicago, Ill.
Shoemaker & Co., Lewis F., Harrison Bldg., Philadelphia, Pa.

Snare & Triest Co., 143 Liberty St., New York.
Terry & Tench Co., 131st St. & Lexington Ave., N. Y.
Virginia Bridge & Iron Co., Roanoke, Va.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Warren Construction Co., Warren, Ohio.
Whitehead & Kales Iron Works, Detroit, Mich.
Wilkins, Grant, Atlanta, Ga.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Sulphate of Iron
Carnegie Steel Co., Pittsburg, Pa.

Superheaters
Babcock & Wilcox Co., 85 Liberty St., New York.
Parker Boiler Co., Pennsylvania Bldg., Philadelphia, Pa.
Power Specialty Co., 111 Broadway, New York.

Switchboards
Allis-Chalmers Co., Milwaukee, Wis.
General Electric Co., Schenectady, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

Switch Stands and Switches (See Frogs and Switches)

Tanks and Towers (Water), (See Standpipes, Tanks, Towers)

Tanks (Air Compressors)
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Conklin, H. O., Equipment Co., Harvey, Ill.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
East Jersey Pipe Co., 90 West St., New York.
Graver, Wm., Tank Works, East Chicago, Ind.
Independent Pneumatic Tool Co., Thor Bldg., Chicago.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 Broadway, N. Y.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Janney, Steinmetz & Co., Philadelphia, Pa.
Lake Erie Engineering Works, Buffalo, N. Y.
Minneapolis Steel & Machinery Co., Minneapolis, Minn.
Morris, Co., I. P., Philadelphia, Pa.
Northern Engineering Works, Detroit, Mich.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Petroleum Iron Works, Sharon, Pa.
Phœnix Iron Works Co., Meadville, Pa.
Potter Co., H. K., Trust Bldg., Pittsburg, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.
Union Steam Pump Co., Battle Creek, Mich.

Tanks (Condensers)
Allis-Chalmers Co., Milwaukee, Wis.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
East Jersey Pipe Co., 90 West St., New York.
Graver, Wm., Tank Works, East Chicago, Ind.
International Steam Pump Co., 115 Broadway, New York.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Petroleum Iron Works, Sharon, Pa.

Phœnix Iron Works Co., Meadville, Pa.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.

Tanks (Creosoting)
Allis-Chalmers Co., Milwaukee, Wis.
Carbolineum Wood Preserving Co., 349 West Broadway, New York.
Carroll-Porter Boiler & Tank Co., Empire Bldg., Pittsburg, Pa.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Cole Mfg. Co., R. D., Newnan, Ga.
Graver, Wm., Tank Works, East Chicago, Ind.
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Petroleum Iron Works, Sharon, Pa.
Phœnix Iron Works Co., Meadville, Pa.
Power & Mining Machinery Co., Cudahy, Wis.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.
Traylor Engineering Co., Allentown, Pa.

Tanks (Flush)
Lake Erie Engineering Works, Buffalo, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Pacific Flush Tank Co., 184 La Salle St., Chicago, Ill.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.

Tanks (Wooden)
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Flint & Walling Mfg. Co., Kendallville, Ind.
Longenecker & Co., Chas., 150 Nassau St., New York.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles, Cal.
Portland Wood Pipe Co., Box 4038, Portland, Ore.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Wendnagel & Co., 22d & Jefferson Sts., Chicago, Ill.

Tapes (Steel), (See Engineers' and Surveyors' Instruments and Supplies, also Rules and Tapes)

Tapping Machines
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Smith, A. P., Mfg. C., Newark, N. J.
Water Works Equipment Co., 50 Church St., New York.

Tar
Barrett Mfg. Co., 17 Battery Pl., New York.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Technical Books (See Books, Engineering and Technical)

Tees (See Structural Steel)

Terra Cotta (Architectural)
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.

Terra Cotta (Fireproofing)
National Fire Proofing Co., 115 Adams St., Chicago, Ill.
Patton Clay Mfg. Co., Patton, Cambria Co., Pa.
Warner Co., Chas., Wilmington, Del.

Testing Laboratories (Chemists, Etc.)
Conard, Wm. R., Burlington N. J.
Dow & Smith, 24 East 21st St., New York.
Gulick-Henderson & Co., 439 Third Ave., Pittsburg, Pa.
Hallett, Nelson A., 1 Ashburton Pl., Boston, Mass.
Hunt & Co., Robert W., Monongahela Bank Bldg., Pittsburg, Pa.
Lehigh Valley Testing Laboratory, Allentown, Pa.
Love, E. G., 122 Bowery, New York.
McKenna, C. F., Hudson Terminal, New York.

Thimble (Wire Rope)
American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Leschen & Sons Rope Co., A., St. Louis, Mo.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Roebling's Sons Co., John A., Trenton, N. J.

Ties (Steel and Wood)
Barber Asphalt Paving Co., Maurer, N. J.
Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Gulfport Creosoting Co., Gulfport, Miss.
Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Tile
American District Steam Co., Lockport, New York.
Climax Road Machine Co., Marathon, N. Y.
National Paving Brick Mfg. Assoc., Board of Trade Bldg., Indianapolis, Ind.
Patton Clay Mfg. Co., Patton, Cambria, Co., Pa.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Tipples and Bunkers
Burger Iron Co., Akron, Ohio.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Heyl & Patterson, Inc., Pittsburg, Pa.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Wisconsin Bridge & Iron Co., No. Milwaukee, Wis.

Track (Cast-Iron Plate)
Hunt Co., C. W., West New Brighton, N. Y.
Indianapolis Switch & Frog Co., Springfield, Ohio.
Lake Erie Engineering Works, Buffalo, N. Y.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Track Tools
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Fairbanks Co., Broome & Lafayette Sts., New York.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
McCoy Co., Henry J., 67 Dey St., New York.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Track (Portable), (See Rails and Track)

Traction Ditching Machines

Austin Mfg. Co., 307 Dearborn St., Chicago, Ill.
Flory, S., Mfg. Co., Bangor, Pa.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kingston Mfg. Co., Wilkesbarre, Pa.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
Parsons Co., G. W., Observatory Bldg., Des Moines, Ia.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Shadegg Engine Co., 315 Third St. So., Minneapolis.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Tramways (Overhead)

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Dodge Co., J. M., Nicetown, Philadelphia, Pa.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Monighan Machine Co., 823 Carroll Ave., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Northern Engineering Works, Detroit, Mich.
Union Iron Works, Hoboken, N. J.
Wonham, Magon Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Tramways (Wire Rope)

American Steel & Wire Co., Com'l Nat'l Bank Bldg., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Flory, S., Mfg. Co., Bangor, Pa.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Monighan Machine Co., 823 Carrol Ave., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Roebling's Sons Co., John A., Trenton, N. J.

Transits

Ainsworth, Wm., & Sons, Denver, Col.
Architects' & Engineers' Supply Co., 1010 Grand Ave., Kansas City, Mo.
Berger, C. L., & Sons, 37 Williams St., Boston, Mass.
Buff & Buff Mfg. Co., Boston, Mass.
Hanna Mfg. Co., Troy, N. Y.
Iszard-Warren Co., Inc., 1122 Vine St., Philadelphia, Pa.
Keuffel & Esser Co., 127 Fulton St., New York.
Kolesch & Co., 138 Fulton St., New York.
Prince, L. M., 108 W. Fourth St., Cincinnati, Ohio.
Surveyors' Instrument Exchange, Box 943, Phila., Pa.
Williams, Brown & Earle 918 Chestnut St., Phila., Pa.

Transmission Rope (See, Rope, Transmission Power)

Transmission Towers (Steel)
Aermotor Co., 1215 12th St., Chicago, Ill.
Wendnagel & Co., 22nd & Jefferson Sts., Chicago, Ill.

Traps (Steam)
American Blower Co., Detroit, Mich.
American District Steam Co., Lockport, New York.
American Radiator Co., 104 W. 42d St., New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Golden-Anderson Valve Specialty Co., 105 Sixth St., Pittsburg, Pa.
Jenkins Bros., 71 John St., New York.
Morris Co., I. P., Philadelphia, Pa.
Schott, W. H., 125 Monroe St., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.

Tree Guards (Iron)
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Stewart Iron Works Co., Cincinnati, Ohio.

Trench Braces
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Conklin, H. O., Equipment Co., Harvey, Ill.
Duff Mfg. Co., N. S., Pittsburg, Pa.
Dunn Mfg. Co., N. S., Pittsburg, Pa.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Kalamazoo Foundry & Machine Co., Kalamazoo, Mich.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Tidewater Iron Works, 8th & Jefferson Sts., Hoboken, N. J.

Trench Excavating Machinery
Carson Trench Machine Co., 16 Dorrance St., Boston, Mass.
Conklin, H. O., Equipment Co., Harvey, Ill.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Flory S., Mfg. Co., Bangor, Pa.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Kingston Mfg. Co., Wilkesbarre, Pa.
Lambert Hoisting Engine Co., Newark, N. J.
Municipal Engineering & Contracting Co., Railway Exchange, Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
New York Cableway & Engineering Co., 1 Rector St., New York.
Parsons, G. W., Co., Observatory Bldg., Des Moines, Ia.
St. Paul Ditcher & Carrier Co., St. Paul, Minn.
Union Iron Works, Hoboken, N. J.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Trolleys
Browning, Victor R., & Co., Cleveland, Ohio.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chisholm & Moore Mfg. Co., Cleveland, Ohio.
Fairbanks Co., Broome & Lafayette Sts., New York.
Hunt Co., C. W., West New Brighton, N. Y.
Kiesler Co., 72 Pratt St., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Union Iron Works, Hoboken, N. J.
Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.
White & Co., J. G., Inc., 43 Exchange Pl., New York.
Whitehead & Kales Iron Works, Detroit, Mich.

Tube Mills
Allis-Chalmers Co., Milwaukee, Wis.
Bartlett, C. O., & Snow Co., Cleveland, Ohio.
Power & Mining Machinery Co., Cudahy, Wis.
Prosser, Thos., & Son ("Krupp"), 15 Gold St., N. Y.
Raymond Bros. Impact Pulverizer Co., 145 Laflin St., Chicago, Ill.
Smidth & Co., F. L., 50 Church St., New York.
Sturtevant Mill Co., Harrison Sq., Boston, Mass.
Traylor Engineering Co., Allentown, Pa.

Tubes (Boiler)
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Turbine Pumps
Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Buffalo Steam Pump Co., Buffalo, N. Y.
De Laval Steam Turbine Co., Trenton, N. J.
Erie Pump & Engine Co., Erie, Pa.
International Steam Pump Co., 115 Broadway, N. Y.
Jeanesville Iron Works Co., Hazleton, Pa.
Lawrence Machine Co., Lawrence, Mass.
Morris Co., I. P., Philadelphia, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Schott, W. H., 125 Monroe St., Chicago, Ill.
Watson-Stillman Co., 50 Church St., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.

Turbines (Hydraulic)
Allis-Chalmers Co., Milwaukee, Wis.
Erie Pump & Engine Co., Erie, Pa.
Leffel & Co., James, Springfield, Ohio.
Morris Co., I. P., Philadelphia, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Prescott, Fred. M., Steam Pump Co., Milwaukee, Wis.
Smith Co., S. Morgan, York, Pa.

Turbines (Steam)
Alberger Pump Co., 95 Liberty St., New York.
Allis-Chalmers Co., Milwaukee, Wis.
De Laval Steam Turbine Co., Trenton, N. J.
D'Olier Engineering Co., 121 S. 11th St., Phila., Pa.
General Electric Co., Schenectady, N. Y.
Morris Co., I. P., Philadelphia, Pa.
Osbun Co., B. M., Com'l Nat'l Bank Bldg., Chicago, Ill.
Sturtevant, B. F., Co., Hyde Park, Mass.
Westinghouse Machine Co., Pittsburg, Pa.

Turnbuckles
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Cleveland City Forge & Iron Co., Cleveland, Ohio.
Conklin, H. O., Equipment Co., Harvey, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Janney, Steinmetz & Co., Philadelphia, Pa.
Kratzer & Co., W. N., 3230 Smallman St., Pittsburg, Pa.
Leschen & Sons Rope Co., A., St. Louis, Mo.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Roebling's Sons Co., John A., Trenton, N. J.
Scully Steel & Iron Co., Chicago, Ill.
Virginia Bridge & Iron Co., Roanoke, Va.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Turntables
Boston Bridge Works, Inc., 47 Winter St., Boston, Mass.
Brown Hoisting Machinery Co., Cleveland, Ohio.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Hunt Co., C. W., West New Brighton, N.Y.
Jackson, Geo. W., Inc., 179 W. Jackson Blvd., Chicago, Ill.
Lake Erie Engineering Works, Buffalo, N. Y.
Northern Engineering Works, Detroit, Mich.
Ohio Ceramic Engineering Co., Cleveland, Ohio.
Pennsylvania Steel Co., B. & C. Dept., Steelton, Pa.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Turntables (Overhead)
Northern Engineering Works, Detroit, Mich.
Star Expansion Bolt Co., 147 Cedar St., New York.
Union Iron Works, Hoboken, N. J.

Twine (Jute)
American Mfg. Co., 65 Wall St., New York.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Leschen & Sons Rope Co., A., St. Louis, Mo.

Vacuum Cleaning Apparatus
Spencer Turbine Cleaner Co., Hartford, Conn.

Valves (Air)
American District Steam Co., Lockport, New York.
American Well Works, Aurora, Ill.
Ashton Valve Co., 271 Franklin St., Boston, Mass.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Dallett Co., Thos. H., 23d & York Sts., Philadelphia, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Gurney Heater Mfg. Co., 200 Franklin St., Boston, Mass.
Ingersoll Rand Co., 11 Broadway, New York.
Jenkins Bros., 71 John St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Morris Co., I. P., Philadelphia, Pa.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Powell Co., William, 2525 Spring Grove Ave., Cincinnati.
Simplex Valve & Meter Co., 112 N. Broad St., Phila., Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Blow-off)
American Well Works, Aurora, Ill.
Ashton Valve Co., 271 Franklin St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Golden Anderson Valve Specialty Co, 105 6th St., Pittsburg, Pa.
Jenkins Bros., 71 John St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati.
Scully Steel & Iron Co., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves, (Angle, Check, Gate and Globe, for Water and Steam)

American District Steam Co., Lockport, New York.
American Well Works, Aurora, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Chapman Valve Mfg. Co., 49 John St., New York.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Flint & Walling Mfg. Co., Kendallville, Ind.
Fox & Co., John, 253 Broadway, New York.
Golden Anderson Valve Specialty Co., 105 6th St., Pittsburg, Pa.
Gurney Heater Mfg. Co., 200 Franklin St., Boston, Mass.
Jenkins Bros., 71 John St., New York.
International Steam Pump Co., 115 Broadway, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lunkenheimer Co., Cincinnati, Ohio.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Powell Co., Wm., 2525 Spring Grove Ave., Cincinnati.
Power Specialty Co., 111 Broadway, New York.
Smith, A. P., Mfg. Co., Newark, N. J.
Wiener Co., Ernst, Fulton & Church Sts., New York.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Foot)

American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Dayton Hydraulic Machinery Co., Dayton, Ohio.
Emerson Steam Pump Co., Alexandria, Va.
Fairbanks Co., Broome & Lafayette Sts., New York.
Flint & Walling Mfg. Co., Kendallville, Ind.
Fox & Co., John, 253 Broadway, New York.
International Steam Pump Co., 115 Broadway, N. Y.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Lawrence Machine Co., Lawrence, Mass.
Wood & Co., R. D., 400 Chestnut St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Pump)

American Well Works, Aurora, Ill.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.
Flint & Walling Mfg. Co., Kendallville, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
International Steam Pump Co., 115 Broadway, N. Y.
Jenkins Bros., 71 John St., New York.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Worthington, Henry R., 115 Broadway, New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Pressure Reducing)

American District Steam Co., Lockport, New York.
American Well Works, Aurora, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Golden Anderson Valve Specialty Co., 105-6th St., Pittsburg, Pa.
Jenkins Bros., 71 John St., New York.

Walworth Mfg. Co., Boston, Mass.
Watson-Stillman Co., 50 Church St., New York.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Regulating)

American District Steam Co., Lockport, New York.
American Well Works, Aurora, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Golden Anderson Valve Specialty Co., 105 6th St., Pittsburg, Pa.
Jenkins Bros., 71 John St., New York.
Simplex Valve & Meter Co., 112 N. Broad St., Philadelphia, Pa.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Safety)

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Ashton Valve Co., 271 Franklin St., Boston, Mass.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Jenkins Bros., 71 John St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Sluice)

American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coffin Valve Co., Neponset, Boston, Mass.
Coldwell-Wilcox Co., Newburgh, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Fox & Co., John, 253 Broadway, New York.
Pittsburgh Mfg. Co., Pittsburgh, Pa.
Smith Co., S. Morgan, York, Pa.
Vulcan Iron Works, 28 W. Irving Ave., Chicago, Ill.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Valves (Water Relief)

Alberger Pump Co., 95 Liberty St., New York.
American Spiral Pipe Works, P. O. Box 485, Chicago, Ill.
American Well Works, Aurora, Ill.
Ashton Valve Co., 271 Franklin St., Boston, Mass.
Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia, Pa.
Clow, Jas. B., & Sons, 350 Franklin St., Chicago, Ill.
Coldwell-Wilcox Co., Newburgh, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Golden Anderson Valve Specialty Co., 105 6th St., Pittsburg, Pa.
International Steam Pump Co., 115 Broadway, N. Y.
Jenkins Bros., 71 John St., New York.
Lunkenheimer Co., Cincinnati, Ohio.
Morris Co., I. P., Philadelphia, Pa.
Walworth Mfg. Co., Boston, Mass.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Ventilating Apparatus

Allis-Chalmers Co., Milwaukee, Wis.
American Blower Co., Detroit, Mich.
Baldwin, William J., World Bldg., New York.
Buffalo Forge Co., Buffalo, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.
Star Expansion Bolt Co., 147 Cedar St., New York.
Sturtevant, B. F., Co., Hyde Park, Mass.

Ventilating Apparatus (Sash Operating)

Cassidy, Isaac, Summer Ave. & Erie R. R., Newark, N. J.
Drouvé Co., G., Bridgeport, Conn.
Hitchings & Co., 1170 Broadway, New York.
Lord & Burnham Co., Irvington-on-Hudson, N. Y.
Lupton's Sons Co., David, Allegheny Ave. & Witte St., Philadelphia, Pa.
Star Expansion Bolt Co., 147 Cedar St., New York.
Van Noorden Co., E., 944 Massachusetts Ave., Boston.

Ventilators

American Blower Co., Detroit, Mich.
Badger, E. B., & Sons Co., 75 Pitts St., Boston, Mass.
Buffalo Forge Co., Buffalo, N. Y.
Burt Mfg. Co., Akron, Ohio.
Drouvé Co., G., Bridgeport, Conn.
Globe Ventilator Co., Troy, N. Y.
Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
Lupton's Sons Co., David, Allegheny Ave. & Witte St., Philadelphia, Pa.
New York Blower Co., Stewart Ave., Chicago, Ill.
Van Noorden Co., E., 944 Massachusetts Ave., Boston,

Wagons (Ash)

Eagle Wagon Works, Auburn, New York.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Studebaker Bros. Mfg. Co., South Bend, Ind.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.
Watson Wagon Co., Canastota, N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Wagons (Contractors')

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Avery Company, Peoria, Ill.
Bergen Point Iron Works, 149 Broadway, New York.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Burness Concrete Truck Co., Scarritt Bldg., Kansas City, Mo.
Climax Road Machine Co., Marathon, N. Y.
Conklin, H. O., Equipment Co., Harvey, Ill.
Eagle Wagon Works, Auburn, New York.
Hough Co., Wm. B., Monadnock Blk., Chicago, Ill.
Koehring Machine Co., Milwaukee, Wis.
Longenecker & Co., Chas., 150 Nassau St., New York.
Marsh Co., 970 Old Colony Bldg., Chicago, Ill.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.
Studebaker Bros., Mfg. Co., South Bend, Ind.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Watson Wagon Co., Canastota, N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Wagons (Dumping)

Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Climax Road Machine Co., Marathon, N. Y.
Eagle Wagon Works, Auburn, New York.
Koppel Co., Arthur, Pittsburg, Pa.
Lally, Patrick, & Sons, 21 W. 1st St., S. Boston, Mass.
Longenecker & Co., Chas., 150 Nassau St., New York.
McCoy Co., Henry J., 67 Dey St., New York.

National Equipment Co., 276 Dearborn St., Chicago, Ill.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Sproul, Harvey B., Peekskill, N. Y.
Studebaker Bros., Mfg. Co., South Bend, Ind.
Troy Wagon Works Co., S. Walnut St., Troy, Ohio.
United States Equipment Co., 1201 Fisher Bldg., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Watson Wagon Co., Canastota, N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Wagons (Garbage)
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Bergen Point Iron Works, 149 Broadway, New York.
Eagle Wagon Works, Auburn, New York.
Edson Mfg. Co., 255 Atlantic Ave., Boston, Mass.
Koppel Co., Arthur, Pittsburg, Pa.
Lally, Patrick & Sons, 21 W. 1st St., S. Boston, Mass.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Studebaker Bros. Mfg. Co., South Bend, Ind.
Troy Wagon Works Co., So. Walnut St., Troy, Ohio.
Watson Wagon Co., Canastota, N. Y.
Whitehead & Kales Iron Works, Detroit, Mich.
Youngstown Car Mfg. Co., Youngstown, Ohio.

Wagons (Oil)
Graver, Wm., Tank Works, East Chicago, Ind.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Studebaker Bros. Mfg. Co., South Bend, Ind.

Wall Coping
Evens & Howard Fire Brick Co., St. Louis, Mo.
Robinson Clay Product Co., Flatiron Bldg., New York.
Warner Co., Chas., Wilmington, Del.

Washers (Air)
American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
New York Blower Co., Stewart Ave., Chicago, Ill.

Water Columns
Golden Anderson Valve Specialty Co., 105 6th St., Pittsburg, Pa.
Lunkenheimer Co., Cincinnati, Ohio.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.

Water-Main Cleaning
National Water-Main Cleaning Co., 61 Park Row, N. Y.

Waterproofing
American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Aquabar Co., The, 1228 Locust St., Philadelphia, Pa.
Barber Asphalt Paving Co., Maurer, N. J.
Barrett Mfg. Co., 17 Battery Pl., New York.
Elaterite Paint & Mfg. Co., Des Moines, Ia.
Glidden Varnish Co., Cleveland, Ohio.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Miller & Co., C. L., 110 E. 23d St., New York.
Sicilian Asphalt Paving Co., 41 Park Row, New York.
Standard Asphalt & Rubber Co., 205 La Salle St., Chicago, Ill.
Texas Co., 17 Battery Pl., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Wadsworth, Howland & Co., 156 Fifth Ave., New York.

Wadsworth Stone & Paving Co., Bessmer Bldg., Pittsburg, Pa.
Warner Co., Chas., Wilmington, Del.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.
Waterproofing Co., 147 E. 35th St., New York.

Waterproofing Compounds

American Asphaltum & Rubber Co., 600-609 The Harvester Bldg., Chicago, Ill.
Aquabar Co., The, 1228 Locust St., Philadelphia, Pa.
Barber Asphalt Paving Co., Maurer, N. J.
Elaterite Paint & Mfg. Co., Des Moines, Ia.
Glidden Varnish Co., Cleveland, Ohio.
Hydrex Felt & Engineering Co., 120 Liberty St., N. Y.
Johns-Manville Co., H. W., 100 William St., New York.
Knickerbocker Chemical Co., 24 & 26 Stone St., N. Y.
Miller & Co., C. L., 110 E. 23d St., New York.
Sandusky Portland Cement Co., Sandusky, Ohio.
Texas Co., 17 Battery Pl., New York.
Trussed Concrete Steel Co., Trussed Concrete Bldg., Detroit, Mich.
Vulcanite Portland Cement Co., Flatiron Bldg., N. Y.
Warner Co., Chas., Wilmington, Del.
Warren-Ehret Co., Land Title Bldg., Philadelphia, Pa.

Water Softeners

Booth Co., L. M., 136 Liberty St., New York.
Chicago Bridge & Iron Works, 105th & Throop Sts., Chicago, Ill.
Graver, Wm., Tank Works, East Chicago, Ind.
Jewell Engineering Co., Cable Bldg., Chicago, Ill.
New York Continental Jewell Filteration Co., Mills Bldg., New York.
Pittsburg Filter Mfg. Co., Farmers' Bank Bldg., Pittsburg, Pa.
Purification & Engineering Co., 52 Church St., N. Y.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.

Waterworks (Air Pressure)

Allis-Chalmers Co., Milwaukee, Wis.
American Well Works, Aurora, Ill.
Shadegg Engine Co., 315 Third St. So., Minneapolis.

Weighing Machinery

Conveying Weigher Co., 92 West St., New York.
Fairbanks Co., Broome & Lafayette Sts., New York.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Wallace Hoist Sales Co., Ft. Wayne, Ind.

Welding Processes

Davis-Bournonville Co., 88 West St., New York.
Goldschmidt, Thermit, Co., 90 West St., New York.

Well-Drilling Machinery

American Mfg. Co., 65 Wall St., New York.
American Well Works, Aurora, Ill.
Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.
Austin Mfg. Co., 315 Dearborn St., Chicago, Ill.
Austin-Western Co., Ltd., 315 Dearborn St., Chicago, Ill.
Broderick & Bascom Rope Co., 805 N. Main St., St. Louis, Mo.
Carnegie Steel Co., Pittsburg, Pa.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Dean Bros. Steam Pump Co., Indianapolis, Ind.
Douglas, W. & B., Middletown, Conn.
Dow, Geo. E., Pumping Engine Co., San Francisco, Cal.

Epping-Carpenter Co., Pittsburg, Pa.
Fairbanks Co., Broome & Lafayette Sts., New York.
Goulds Mfg. Co., Seneca Falls, N. Y.
Huron Steel & Iron Co., Norwalk, Ohio.
Ingersoll-Rand Co., 11 Broadway, New York.
International Steam Pump Co., 115 Broadway, New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Keystone Driller Co., Beaver Falls, Pa.
Laidlaw-Dunn-Gordon Co., 115 Broadway, New York.
Leschen & Sons Rope Co., A. St. Louis, Mo.
Phillips & Worthington, 90 West St., New York.
Pittsburg Tubular Steel Whiffletree Co., Pittsburg, Pa.
Struthers-Wells Co., Warren, Pa.
Sweeney & Gray, 81 Sixth St., Long Island City, N. Y.
Union Steam Pump Co., Battle Creek, Mich.

Wells

Artesian Well & Supply Co., Banigan Bldg., Providence, R. I.
Phillips & Worthington, 90 West St., New York.

Wheelbarrows

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Conklin, H. O., Equipment Co., Harvey, Ill.
Fairbanks Co., Broome & Lafayette Sts., New York.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
Koehring Machine Co., Milwaukee, Wis.
McCoy Co., Henry J., 67 Dey St., New York.
Ransome Concrete Machinery Co., Dunellen, N. J.
Smith, T. L., Co., 305 Old Colony Bldg., Chicago, Ill.
Standard Scale & Supply Co., 52 S. Canal St., Chicago, Ill.
Sterling Wheelbarrow Co., Milwaukee, Wis.
Toledo Wheelbarrow Co., Toledo, Ohio.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wiener Co., Ernst, Fulton & Church Sts., New York.

Wheels (Car)

Archer Iron Works, Inc., 34th Pl. & Western Ave., Chicago, Ill.
Carnegie Steel Co., Pittsburg, Pa.
Douglas, Geo. B., 29 Broadway, New York.
Du Bois Iron Works, Du Bois, Pa.
Hunt Co., C. W., West New Brighton, N. Y.
Koppel Co., Arthur, Pittsburg, Pa.
McCoy Co., Henry J., 67 Dey St., New York.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Stuebner, G. L., Iron Works, Long Island City, N. Y.
Union Iron Works, Hoboken, N. J.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Wonham, Magor Car & Mfg. Co., 30 Church St., N. Y.
Youngstown Car Mfg. Co., Youngstown, Ohio.
Zelnicker Supply Co., Walter A., St. Louis, Mo.

Wheels (Sprocket)

Burrell Mfg. Co., Bradley, Ill.
Chain Belt Co., Milwaukee, Wis.
Climax Road Machine Co., Marathon, N. Y.
Cresson Co., Geo. V., Allegheny Ave., W. 17th St., Philadelphia, Pa.

Iroquois Iron Works, 178 Walden Ave., Buffalo, N. Y.
Wallace Hoist Sales Co., Ft. Wayne, Ind.
Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.

Whistles

Powell, William, Co., 2525 Springrove Ave., Cincinnati.
Lunkenheimer Co., Cincinnati, Ohio.

Winches

American Hoist & Derrick Co., St. Paul, Minn.
American Ship Windlass Co., Providence, R. I.
Bond Co., Harold L., 140 Pearl St., Boston, Mass.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Clyde Iron Works, Duluth, Minn.
Contractors' Plant Mfg. Co., Buffalo, N. Y.
Dobbie Foundry & Machine Co., Niagara Falls, N. Y.
Fairbanks Co., Broome & Lafayette Sts., New York.
Inter-State Equipment & Engineering Co., 305 Old Colony Bldg., Chicago, Ill.
National Equipment Co., 276 Dearborn St., Chicago, Ill.
Union Iron Works, Hoboken, N. J.

Windmills

Abenaque Machine Works, Westminster Sta., Vt.
Channon Co., H., Market & Randolph Sts., Chicago, Ill.
Flint & Walling Mfg. Co., Kendallville, Ind.
Griffiths Iron Works Co., 23d & Papin Sts., St. Louis.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.

Windmill Tanks

Aermotor Co., 1215 12th St., Chicago, Ill.
Abenaque Machine Works, Westminster Sta., Vt.
Flint & Walling Mfg. Co., Kendallville, Ind.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
National Wood Pipe Co., Equitable Bank Bldg., Los Angeles, Cal.
Pacific Tank Co., Equitable Bank Bldg., Los Angeles.
Phillips & Worthington, 90 West St., New York.
Scaife & Sons Co., Wm. B., 221 1st Ave., Pittsburg, Pa.
U. S. Wind Engine & Pump Co., 28 Water St., Batavia, Ill.
Wendnagel & Co., 22d & Jefferson Sts., Chicago, Ill.

Window Frames and Sash (Fireproof)

Badger, E. B., & Sons Co., 63-75 Pitts St., Boston, Mass.
Griffiths Iron W'ks Co., 23d & Papin Sts., St. Louis, Mo.
Irwin, Thos. W., Mfg. Co., N. S., Pittsburg, Pa.
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American System of Reinforcing, 189 La Salle St., Chicago, Ill.
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